

Roland

Electronic Musical Instruments Vol.2



A new concept of control for a new era in

The MicroComposer is a device for the complete control of a synthesizer in the production of electronic music in the studio. The MicroComposer is to "music processing" what the computer is to data processing, and word processing.

Now you can produce your own electronic music, even if you do not play a keyboard. You can program the MC-8 with a musical composition using an external source such as a sequencer or directly from a keyboard instrument. Or you can program the MicroComposer with its own integral ten-key keyboard. With its multi-channel output, as many as eight independent voice lines may be controlled simultaneously. This means that the MicroComposer can greatly increase the voice capacity of a multi-channel recording system, i.e., with an eight channel recorder more than 60 independent voice lines may be recorded.

When composing, the MicroComposer and a synthesizer are like an orchestra standing by, ready at any given moment to play what you have created. Melodies, voice lines, tempo, dynamics, embellishments . . . even tone colors can be programmed into the MicroComposer's electronic memory, as simply as adding figures with a desktop calculator.

You always have instant access to any variable at any point in your composition . . . revisions such as insertions and deletions can be made at any time without affecting the remainder of the program.

You can use a cassette tape recorder to record the digital information in the MicroComposer's memories for permanent storage. And this same information can be reloaded back into the MicroComposer's memories for performance or editing.

The art of producing computerized music is now yours with the Roland MC-8 MicroComposer.

Why the MC-8 MicroComposer was Developed.

Time and again attempts have been made to apply computer technology to the production of music. An essential prerequisite to creating music in this manner is a substantial knowledge of computers. Unfortunately, there are not many musicians with a sufficient background in computer hardware and software. Therefore, the production of electronic music via computers has been severely limited.

In sharp contrast to earlier methods, the MC-8 MicroComposer can be used by anyone who loves music . . . even though they may have little or no knowledge of computers.

Background of the MC-8

For both the musical world and commercial advertising the synthesizer has become a virtual necessity. Its popularity has increased remarkably, and the number of synthesizer enthusiasts is still growing.

Playing a synthesizer has nearly always required reasonably skillful keyboard performance. In the studio, the synthesizer's monophonic design allows recording of only a single track at a time. Multi-channel recording of synthesized music calls for sophisticated recording techniques and lots of time if precise results are to be obtained.

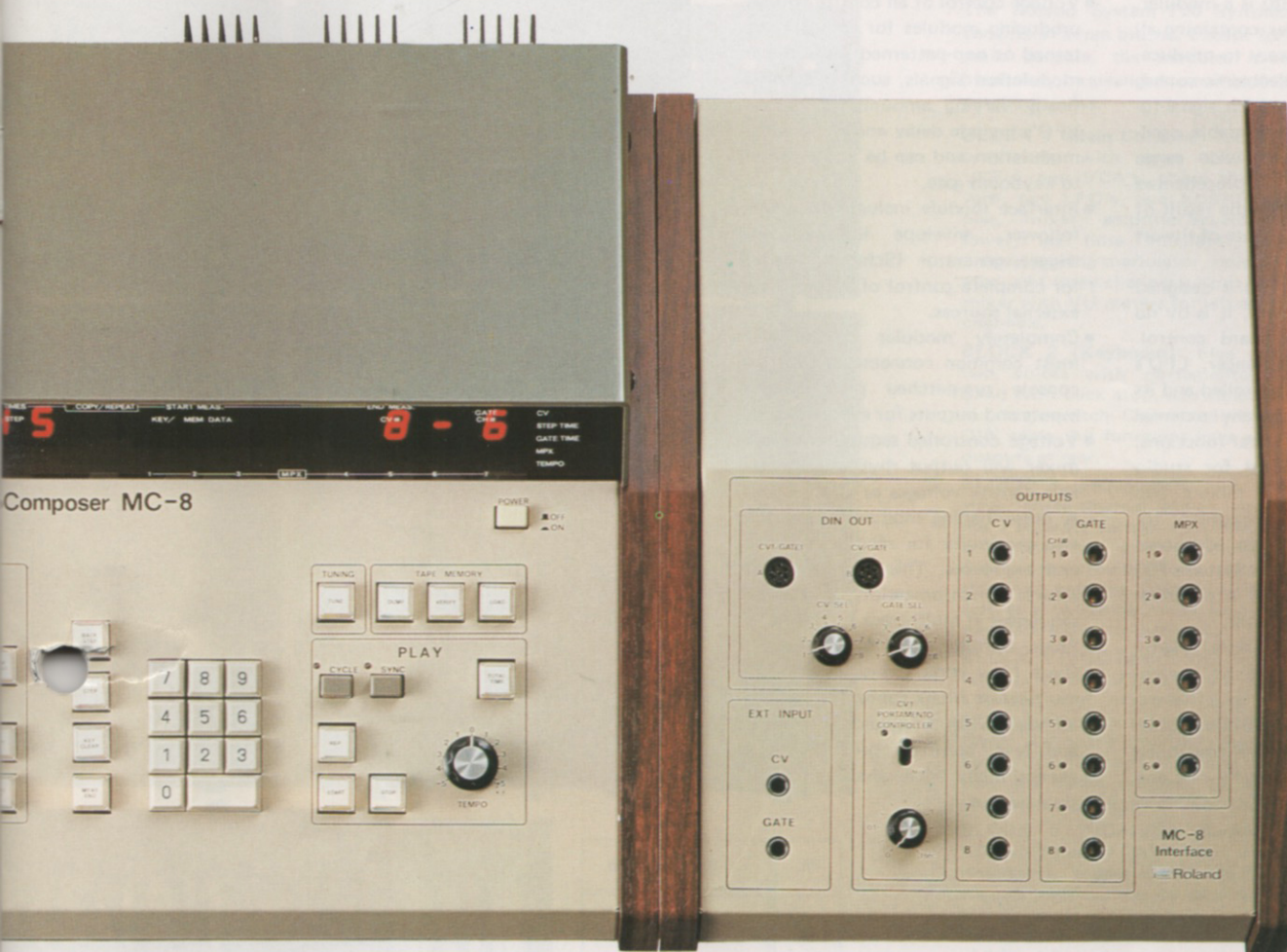
The MicroComposer overcomes these disadvantages. Instead of a conventional keyboard, the MC-8 MicroComposer incorporates a unique, ten-key control panel. This allows anyone with a moderate knowledge of music to play, with precision, music that would otherwise require advanced performance skills. And the results are in no way dependent upon the keyboard skills of the performer.

The Roland MC-8 MicroComposer opens up a whole new world of musical possibilities for composers, arrangers, performers, recordists, and educators everywhere. The ideas mentioned here point the direction to an amazing new method of creating music . . . music processing through the Roland MC-8 MicroComposer.

- Loading the MicroComposer is done by assigning numerical values to musical notation factors such as pitch, tempo, dynamics, and timbre. As many as eight independent voice lines may be accommodated.
- Loading may be done with either a musical keyboard, or by punching buttons on the MC-8's ten-key "adding machine" keyboard.
- After loading is complete, any portion of the composition may be isolated and instantly accessed for editing or revising, such as adding or deleting, or changing of values. Even the running time may be altered, as simply as setting a metronome.
- Multi-channel output allows controlling up to eight independent voice lines at the same time.
- Memory capacity is more than sufficient to store all voice lines of a normal popular song.
- The MC-8's Sync Function allows precise multi-track recording, and its multi-channel output significantly multiplies the voice capacity of your present multichannel recording system. For example, with an eight channel recording system, more than 60 independent voice lines are available without resorting to second-generation recording (overdub).
- When the START Button is pushed, the finished composition, or any segment of any duration of the composition, may be played back for recording, review or analysis.
- The digital information in the MicroComposer's memories can be loaded directly onto tape for permanent storage, using a conventional cassette tape recorder, and reloaded back into the MicroComposer's memories for later use or editing.
- Using conventional patch cord techniques, connecting to the Roland System 100 or System 700 is simple. And of course the MicroComposer is compatible with other makes of synthesizers as well.



electronic music composition.



CV OUTPUTS

• 8 independent CV outputs; assignable to any GATE channel output in any combination • Pitch control sensitivity: 1V/8Va • Voltage range: 0 to +10.58V in 1/12V steps (128 steps) • Pitch range: more than 10 octaves • CV1 portamento control: manual or programmable • CV1 portamento time: to approx 3 seconds

GATE OUTPUTS

• 8 independent gate outputs; switchable to minus gate • Gate voltage, gate on: +15V (no load) • Gate voltage, gate off: 0V • Output impedance: 4.7k Ω • Current sink (minus gate only): 2ma

MULTIPLEX OUTPUTS

• 6 bits, plus one bit for CV1 portamento on/off control Program assignable to any GATE output channel • Pulse voltage, pulse on: +15V (no load) • Pulse voltage, pulse off: 0V • Output impedance: 4.7K Ω • The multiplex output can be used for control of percussion voices or for controlling synthesizer switching functions, etc.

EXTERNAL INPUTS

• CV sensitivity: 1V/8Va • CV voltage range: 0 to +10.58V in 1/12V steps (128 steps) • CV input impedance: 100K Ω • Gate pulse input, nominal: +15V (switchable to minus gate) • Gate pulse, minimum: +5V • Gate input impedance: 100K Ω

TAPE MEMORY OUTPUT

• Signal: FSK; 1.3/2.1KHz • Level: 0dBm • Impedance: 10K Ω

TAPE MEMORY INPUT

• Minimum acceptable level: -10dBm • Impedance: 10K Ω

SYNC OUTPUT

(Same as tape memory output)

SYNC INPUT

(Same as tape memory input)

REMOTE START/STOP

• Minimum pulse voltage: +2.0V • Minimum pulse length: 100ms • Impedance: 10K Ω

MEMORY CAPACITY

• Capacity: 16 kilobytes

In terms of music, capacity will depend on programming. For a single voice line program, capacity is over 5,200 notes. If more than one CV is assigned to a given gate channel, more notes are possible. For example, with four part harmony (four CV outputs assigned to one gate output), more than 10,600 pitches (over 2,600 chords) are possible.

SYSTEM700

TOTAL STUDIO SYSTEMS

A complete studio system you can build

The Roland System 700 is a modular, high quality synthesizer containing all of the elements necessary to produce, modify and control electronic sound. The System 700 offers high signal-to-noise ratio. Its extremely stable oscillators are exceptionally wide range (0.1Hz — 100kHz). Unprecedented features such as these are the result of the most advanced, state-of-the-art circuitry available.

Although the System 700 is designed as a keyboard synthesizer, it is by no means limited to keyboard control. This is because its sequencer, LFO's and S/H's are voltage controlled and its interface module allows any external signal to control synthesizer functions. The System 700 is ideal for studio recording. Further, its mixers and switching units make it excellent for live performance. With an additional keyboard controller, the System 700 offers the capabilities of a programmable, four-voice synthesizer.

- Wide-range (0.1Hz — 100kHz), highly stable VCO's for audio or control applications.
- Multi-mode voltage controlled filters now available with voltage controlled resonance for exceptionally rich and variable timbres.

- Voltage control of all control-voltage-producing modules for complex patterned or non-patterned variations in modulation signals, such as automatically varying amounts of vibrato. LFO's include delay and pulse width modulation and can be phase locked to keyboard gate.
- Interface module includes frequency follower, envelope follower and trigger generator (Schmidt trigger) for complete control of system from external sources.
- Completely modular design with most common connections on main console pre-patched plus external inputs and outputs for every module.
- Voltage controlled sequencer/switch-mixer will output rhythmically-variable control voltages or input signals. A pulse-shaping module assures precise continuity for recording end-to-end sequences. This module further assures synchronization of multiple sequences in multi-track recording.
- Phase shifters, delay modules and a fixed filter bank (consisting of four multi-mode filters connected in parallel, each with frequency, resonance and level controls) provide for an exceptionally rich shaping of the final output.



LABORATORY SYSTEM

A portable modular unit for sound synthesis with all basic features.

This model is the smallest synthesizer with full basic features for a high quality studio system.

A bus connector on the rear allows for future expansion of the system.

Block 2 — Keyboard Controller
Block 8 — Laboratory Console

Block 2 Keyboard Controller

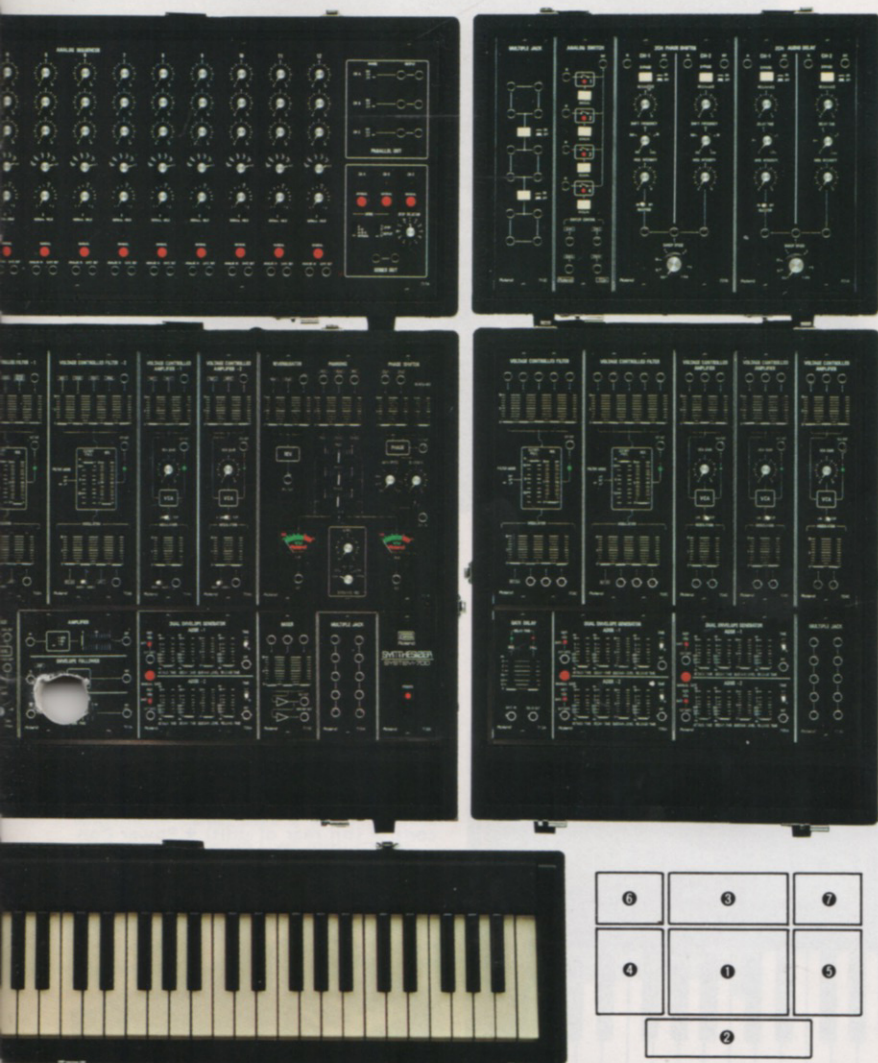
- 61 key (5 octave) C scale • Bender with center off click stop • Portamento control • Dimensions: 1,070 (W) x 120 (H) x 250 (D) mm (42.1" x 4.7" x 9.8") • Weight: 11kg (24.2lbs.)

Block 8 Laboratory

- 3 VCO's • Noise generator • Ring modulator • VCF • VCA • LFO • Dual envelope generator • Sample and hold • Mixer • Dimensions: 440 (W) x 560 (H) x 300 (D) mm (17.3" x 22.0" x 11.8") • Weight: 18kg (39.6 lbs.)



piece-by-piece



MAIN CONSOLE SYSTEM

This system is fully expandable with various sound creation features.



The Roland System 700 Synthesizer consists of seven blocks. Except for the main console, the modules in each block may be arranged to suit individual patching styles.

BLOCK 1 (Main Console): A complete synthesizer with three VCO's, two VCF's, two VCA's, phase shifter, reverb, two LFO's, two ADSR's, multiples, mixer, amplifier-envelope follower, lag time integrator, voltage processor, ring modulator, noise generator, and three-channel output panning mixer with VU meters for left and right channels.

BLOCK 2 (Keyboard): Five octaves, two voices with portamento, pitch Bend with click stop, and variable output range switch. Connected with single DIN cable. All functions have separate outputs at rear.

BLOCK 3 (Sequencer): This twelve-stage, three-channel analog sequencer has a separate voltage controlled clock and start, run, stop functions. Step time/divide provides for programming rhythmic patterns. The sequencer also acts as a switching mixer sending out the input signal to each step.

BLOCK 4 (VCO Bank): This bank contains six VCO's, LFO, S/H, two ADSR's, a mixer, and multiple jacks. Three VCO's have sync function, three have PWM. Keyboard ON/OFF Switch on each VCO, plus control voltage attenuators and range switches for ease of programming frequency modulation.

BLOCK 5 (VCF/VCA Bank): Two VCF's, three VCA's, four envelope generators, a gate delay for delaying triggers to produce multiple envelope effects, and a multiple jack. One VCF is multi-mode. VCA's are quiet, powerful, and linearly and exponentially controllable, as are all VCA's of the System 700.

BLOCK 6 (Interface/Mixer): Interface module, VCA, Filter Bank and a nine-channel mixer. Interface allows external control and mixer allows for a variety of applications such as combining or selecting complete patches, as often required in live performance.

BLOCK 7 (Phase Shifter/Audio Delay): Two channel phase shifter and audio delay modules for greatly enhancing sound. Analog switch for electronically or manually switching between, or combining, four separate audio signal or control voltages. Switching multiple jack for extended multiple connections or signal routing.

GENERAL SPECIFICATIONS

- All output impedances: 600Ω • All input impedances: more than $50k\Omega$
- Nominal signal levels: 10V p-p
- Nominal control voltage levels: $\pm 10V$
- Nominal gate levels: +15V (minimum: +10V) • Voltage/frequency relations: 1V/8Va

SYSTEM100

SYSTEM SYNTHESIZERS

The economical system synthesizer for serious musicians.

Starting with the Synthesizer 101 with its 37-key keyboard and full range of standard synthesizer elements, build your own complete synthesizer studio by adding the Expander 102, Mixer 103, Sequencer 104 and Monitor Speaker 109 for full-range stereo sound reproduction. And used in conjunction with an external tape deck, the System-100 lets you realize the entire scope of your talents by making it possible to do multi-track recording and a professional mix right in your own home!



SYNTHESIZER 101 Basic unit

The sensible way to start your own studio.

The Roland Synthesizer 101 — the basic unit for the System-100 as well as a fully independent synthesizer in itself — features a full 37-key keyboard and the entire range of standard synthesizer elements including VCO, VCF, VCA, ADSR, LFO and Noise Generator, Variable Pulse Width Modulation on VCO, VCF, High Pass Filter, and Phone Jack.



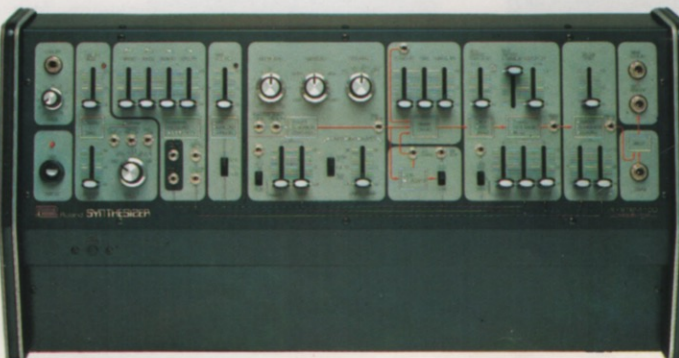
- VCO (Voltage Controlled Oscillator)
- Noise Generator • Audio Mixer
- High Pass Filter • VCF (Voltage Controlled Filter) • VCA (Voltage Controlled Amplifier) • Envelope Generator (ADSR) • LFO (Low Frequency Oscillator) • Glide • Keyboard Control Voltage and Gate Outputs • Standard Oscillator: A = 440Hz • Audio Signal Output • Headphone Output • Keyboard (37 Keys) • Jacks For Computer control (on rear of unit) • Power Consumption: 10W max • Dimensions: 610 (W) x 355 (D) x 145 (H) mm (24.0" x 14.5" x 5.7") • Weight: 9kg (19.8lbs.)



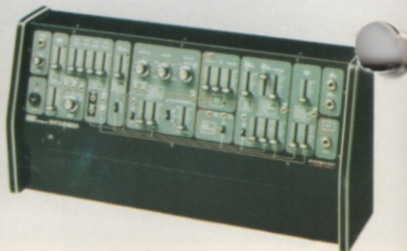
EXPANDER 102

Adds a second channel to double your versatility.

The Expander 102 incorporates all the features of an independent synthesizer with special functions such as Ring Modulator, Sample & Hold and an Internal Mixer. While doubling the number of basic elements contained in the Synthesizer 101, the Expander 102 more than doubles its sound synthesizing capabilities, and produces a 2-channel sound when used in the System-100.



- VCO (Voltage Controlled Oscillator)
- Ring Modulator • Audio Mixer
- High Pass Filter • VCF (Voltage Controlled Filter) • VCA (Voltage Controlled Amplifier) • Envelope Generator (ADSR) • LFO (Low Frequency Oscillator) • Sample and Hold • Internal Mixer • Audio Signal Output • Headphone Output • Power Consumption: 10W max • Dimensions: 610 (W) x 155 (D) x 305 (H) mm (24.0" x 6.1" x 12.0") • Weight: 7.5kg (16.5lbs.)





MIXER 103

The Model 103 Mixer is a 4-channel mixer integrated with an amplifier and reverb unit, used for Pan-pot, Effect Control and Input Selection on each channel. Additional features include Main Effect Pan-pot, Main Reverb, and Main Echo, plus a Monitor Level Control for precise tone monitoring.

- Inputs • Outputs • Echo Jacks
- Headphone Output • Frequency Range: 20 ~ 25,000Hz • S/N: 60dB
- Power Consumption: 25W • Dimensions: 280 (W) x 355 (D) x 145 (H) mm (11.0" x 14.0" x 5.7") • Weight: 6.5kg (14.3lbs.)



SEQUENCER 104

The Sequencer 104 functions to run off a set of programmed control voltages, and can control the VCO to produce repeating musical sequences of any desired pattern. Features include 12 parallel registers for a total of 24 step controls, a Voltage Controlled Clock Oscillator for gate time and clock rate control, Step Controller, and a Master Controller for start, continue, stop and step.

- Clock Oscillator • Master Controller
- Voltage Programmer • Outputs:
- Power Consumption: 5W max • Dimensions: 280 (W) x 355 (D) x 145 (H) mm (11.0" x 14.0" x 5.7") • Weight: 5kg (11lbs.)



MONITOR SPEAKER 109

Enjoy your musical creations in stereo with Roland's Model 109 16 cm speakers. Designed to complement the System-100 in both sound quality and distinctive styling.



- Speaker (16-cm full range/3.5W 8Ω): 1
- Dimensions: 280 (W) x 155 (D) x 305 (H) mm (11.0" x 6.1" x 12")
- Weight: 3kg (6.6lbs.)

PCS-10

Patch cord set for connecting individual units. This includes two 20 cm, 40 cm, 60 cm, 80 cm and 1 m cords, each with two adapter plugs.



SYSTEM 100M

Create the electronic music system you need

The voltage controlled synthesizer is a musical instrument which contains elements that can be connected together, much like building blocks, to build or create almost any sound imaginable. As with most professional systems, the System 100M puts these synthesizer elements into separate modules so that you can build a system which meets your own particular needs. Two sample systems are shown at the extreme right.

All major control and audio inputs for each module have their own input mixers which greatly simplifies patches where multiple inputs are needed. This also means that all patch cord signal levels are high for a much better signal-to-noise ratio. All module inputs and outputs are compatible so that any output may be connected with each other and with most equipment found in the recording studio. Keyboard control voltage, gate and trigger are internally connected so that normally patch cords are not needed for these.

All modules are the same size and weight: 104(W) x 230(H) x 200(D)mm: 1.6kg.



181

49-KEY KEYBOARD CONTROLLER

An expanded version of the above keyboard. Added features are a portamento on/off switch and a bend lever. Also included are a mini-jack and a standard phone jack output so that the beneder may be used for controlling other functions. Dimensions: 846(W) x 236(D) x 100(H)mm; weight: 6.5kg.

191

5 MODULE RACK SYSTEM

(The modules shown mounted in the rack are not included with the rack). Except for its added width and weight, this rack is exactly the same as the Model 190 shown above. Dimensions: 558(W) x 314(H) x 192(D)mm; weight: 6.9kg (without modules).

191B BASE

Stand for 191.

VCO-VCF-VCA

110



BASIC SYNTHESIZER MODULE

This module contains the three main synthesizer elements, and when combined with a Model 140 module, provides all that is needed for the production of one synthesizer voice. This arrangement is particularly convenient in a computer controlled system where the generation of each voice in a composition can be assigned primarily to one module. The connections for signal flow from the VCO, through the VCF, to the VCA are made internally to save patching time. Another internal connection allows a single envelope generator input to control both the VCF and VCA. All internal connections are made with switching jacks so that they can be broken, if desired.

- VCO ● Output: 10Vp-p, 1k Ω ■ Input: 50k Ω
- Freq: 1Hz-30kHz ● Control sens: 1V/8VA
- VCF ● Cutoff freq: 25Hz-20kHz ● Slope: -24dB/8VA ● Control sens: 1V/8VA ● VCA
- Nominal gain: 1, linear ● Freq response: 3Hz-50kHz S/N: 70dB ● High output: 15Vp-p max, 1k Ω ● Low output: 1.5Vp-p max, 3.3k Ω

2VCO

112



DUAL VCO MODULE

This module consists of two independent VCO's in one package with expanded features. Both include three separate variable control inputs, strong and weak sync mode for phase locking, and simultaneous manual and external control of pulse width.

- VCO ● Output: 10Vp-p, 1k Ω ● Input: 50k Ω
- Freq: 1Hz-30kHz ● Control sens: 1V/8VA.

with Roland's compact modular System 100M.

2VCF 121



DUAL VCF MODULE

Two independent voltage controlled low pass filters in one package. Each VCF includes the added feature of a built-in fixed high pass filter with a switch for turning the high pass function off or selecting one of three cutoff points.

Each VCF also includes three audio and three control inputs, and LED's for following signal flow. The green LED's light when a signal appears at the outputs, the red LED's light, for overdrive (distort) condition.

- VCF • Cutoff freq: 25Hz-20kHz • Slope: -24dB/8VA • Freq response: 10Hz-20kHz
- Control sens: 1V/8VA • Fixed high pass filter cutoff points: off, 1kHz, 2kHz, 5kHz.

2ENV-LFO 140



LFO + DUAL ENVELOPE GENERATOR MODULE

This module and the Model 110 module provide the minimum basic elements necessary to produce a single synthesizer voice. Or, used with Models 112, 121, and 130, provides enough elements for two voices.

ADSR'S: Can be triggered from internal gate or gate + trigger, from an external gate, or manually with the front panel push-button. Both envelope generators provide inverted and normal outputs.

LFO: Voltage controlled low frequency oscillator with built-in delay for delayed vibrato effects. KYBD TRIG switch allows phase locking of LFO output to keyboard trigger pulse.

- ENV GEN • Attack: 1.5ms-7.5s • Decay: 4ms-15s • Sustain: 0-10V • Release: 4ms-15s
- Out: 1k Ω • Gate/trig input: 50k Ω , 3V min.
- LFO • Freq: 0.05Hz-30Hz • Control sens: 1V/8VA • Output: 10Vp-p, 1k Ω • Delay time: 0-7s.

2VCA 130

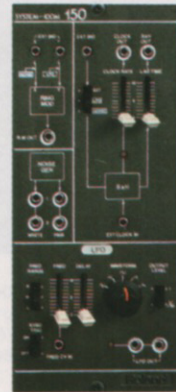


DUAL VCA MODULE

Two independent VCA's in one package, each with a selector switch for linear or exponential control response; also three audio three control inputs.

- VCA • Nominal gain: 1 • Freq response: 3Hz-50kHz; S/N: 70dB • High output: 15Vp-p max, 1k Ω • Low output: 1.5Vp-p max, 3.3k Ω
- Linear response: 10%/1V • Exponential response: 10dB/1V.

RING-NOISE S/H-LFO 150



RING MODULATOR/NOISE GENERATOR/SAMPLE & HOLD/LFO

Ring Modulator: The most common function of the ring modulator is to combine two VCO outputs to produce metallic clanging sounds.

Sample & Hold: The sample and hold can be used for sampling an input waveform for producing control voltage patterns based on that waveform. The musical result is patterns of notes such as arpeggios, random notes, etc.

Noise Generator: White and pink noise for sound effects and non-pitched musical instrument sounds.

- RING • Freq: 20Hz-20kHz • Output: 1k Ω
- Input: 50k Ω , X + Y = 20Vp-p • Input rejection: 60dB • S/H • Clock: 0.2Hz-25Hz • S/H out: 0-10Vp-p max, 1k Ω • Signal input: 10Vp-p max, 50k Ω • NOISE • White/pink: 12Vp-p, 1k Ω • LFO • Freq: 0.05Hz-30Hz
- Control sens: 1V/8VA • Output: 10Vp-p, 1k Ω • Delay time 0-7s.

A Flexible System for Today's Creative Musician

The System 100M is sold as separate units so that you can build up a system to match your own particular needs. The keyboards include 6-conductor cords for power, internal CV, gate, and trigger connections to the system. The racks (190 and 191) contain the power supply, power switch, and voltage regulators for the modules and keyboard. Module mounting screws and a patch cord set (PCS-2) are included.



190 3 MODULE RACK SYSTEM

(The modules shown mounted in the rack are not included with the rack).

Rear panel: 8-pin DIN connectors to supply power to modules; 6-pin DIN plug for expanding the system so that one keyboard may be used to control any number of additional rack systems. Available for 100V, 117V, 220V, 240V, @50/60Hz. Simulated wood ends. Dimensions: 349(W) x 314(H) x 192(D)mm; weight: 5.6kg (without modules): 190B Base for 190 is also available.

180 32-KEY KEYBOARD CONTROLLER

A 1V/8VA low key priority keyboard with three sets of outputs for easing the compatibility with other synthesizer systems: Mini-jacks, standard phone jacks and a 6-pin DIN plug. Outputs include control voltage, gate, and trigger. The control panel on the left contains a TUNING control, a three position TRANSPOSE switch, and a PORTAMENTO control. The ends are simulated wood to match System 100M racks. Dimensions: 589(W) x 236(D) x 100(H)mm; weight: 4.7kg.

Accessories designed especially for the

The RSS (ROLAND STUDIO SYSTEM) Series is a totally new line of rack mount signal processing equipment designed particularly with the problems of the electronic music studio in mind. Modern recording is done in an acoustically "dead" studio with many of the instruments separated from each other so that their sounds can be recorded on separate tracks of a multichannel tape recorder. When this multichannel master tape is mixed down, it becomes essential to add effects to put the "life" back into the sound. With electronic music this becomes even more important since electronic music starts as electrical signals within equipment and thus has no life of its own. Also important is the fact that many components designed for adding life to acoustical instruments are used as a part of the process

for synthesizing sound in electronic music, as well as to add effects to finished sounds. Studio "normal" connections are made through RCA pin jacks on the rear panel. Standard phone jacks are supplied on the front panels so that these components can be quickly and freely connected in any desired arrangement needed in the studio. Front panel INPUT/OUTPUT LEVEL switches allow selection of +20dB input/output levels so that the components may be connected directly into the middle of a synthesizer patch, if desired. Each of the components also features a remote-controlled noise free on/off switching of its function, a useful feature in electronic music. All units feature low noise and low distortion. Standard 19" rack mount.



RV-800

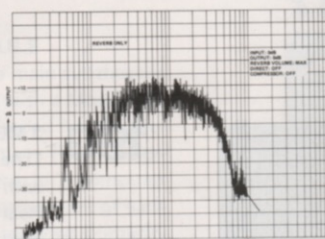
The RV-800 Stereo Reverberation Unit incorporates an optional compressor to increase headroom and allow reverberation effects to be added to low level signals.

The unit includes panning controls for both reverberation and direct signal outputs. The DIRECT switch may be used to decide whether the output will be reverberation only or direct signal with reverberation. External secondary effects (such as echo or a second reverberation unit) are also controllable with the RV-800. Accepts single or two channel inputs. Large easy to read level meters.

- Nominal input level, switchable: +20dBV, 0dBV, -20dBV • Input impedance: 50k Ω , unbalanced • Output level, switchable: 0dBV, -20dBV • Output impedance: 600 Ω , unbalanced • Reverb time: approx. 3sec • External effect: Nominal input level, switchable (rear panel): 0dBV, -20dBV Input impedance: 50k Ω , unbalanced Output level: 0dBV (when front panel meter reads 0dB) Output impedance: 600 Ω , unbalanced • Direct channel only: Frequency response: 10Hz-40kHz; +0dB, -1dB Gain: 0dB; $\pm$ 1dB Harmonic distortion @ 1kHz, 0dBV: less than 0.004% Signal/noise ratio: greater than 100dB ("A" weighted) • Reverb + direct: Signal/noise ratio (REVERB VOLUME at maximum) with: Compressor ON: greater than -70dB ("A" weighted) Compressor OFF: greater than -72dB ("A" weighted) Cross-



talk @ 1kHz, 0dBV: greater than -85dB
 • Power consumption: 12W • Power requirements: 100V, 50/60Hz, 120V, 50/60Hz, 220V, 50/60Hz, 240V, 50/60Hz • Dimensions: 480 x 136 x 342mm Type EIA-3U rack mount
 • Weight: 8.9kg
 Note: 0dBV = 1Vrms



GE-810

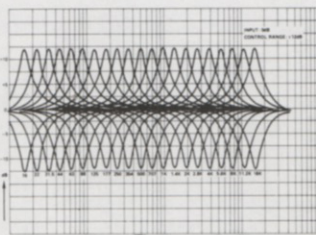
Graphic equalizer with 21 bands at 1/2 octave intervals. The level controls have a selectable range of $\pm$ 3dB, $\pm$ 6dB, or $\pm$ 12dB.

- Nominal input level, switchable: +20dBV, 0dBV, -20dBV • Input impedance: 50k Ω , unbalanced • Output level, switchable: 0dBV, -20dBV • Output level at overdrive (distort): 20dB above rated output (red output LED lights at 15dB above rated output) • Output impedance: 600 Ω , unbalanced • Frequency response*: 10Hz-40kHz; +0dB, -1dB • Gain*: 0dB, $\pm$ 1dB • Harmonic distortion @ 1kHz,



electronic music studio.

0dBV*: less than 0.004% • Signal/noise*: greater than 100dB ("A" weighted) • Frequency level control range, switchable: $\pm 12\text{dB}$, $\pm 6\text{dB}$, $\pm 3\text{dB}$ • Power consumption: 6W • Power requirements: 100V, 50/60Hz; 120V, 50/60Hz; 220V, 50/60Hz; 240V, 50/60Hz • Dimensions: 480 x 136 x 342mm Type EIA-3U rack mount • Weight: 7.25kg 0dBV = 1Vrms
*Measured in EQUALIZE mode with all frequency controls at "0" (NORMAL mode specifications are slightly better).

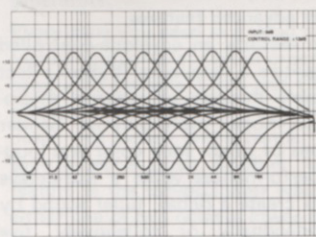
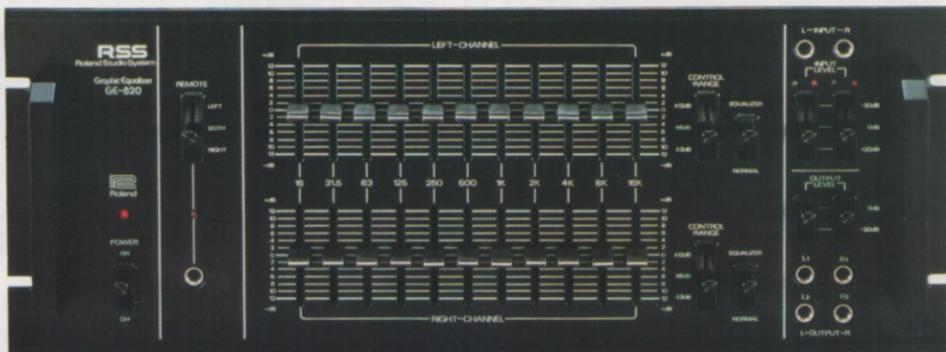


GE-820

Stereo graphic equalizer with 11 bands per channel at one octave intervals. Selectable control range.

• Nominal input level, each channel, switchable: +20dBV, 0dBV, -20dBV • Input impedance: $50\text{k}\Omega$, unbalanced • Output level, each channel, switchable: 0dBV, -20dBV • Output level at overdrive (distort): 20dB above rated output (red output LED lights at 17dB above rated output) • Output impedance: 600Ω , unbalanced • Frequency response*: 10Hz-40kHz; +0dB, -1dB • Gain*: 0dB, $\pm 1\text{dB}$ • Harmonic distortion @ 1kHz, 0dBV*: less than 0.004% • Signal/noise*: greater than 100dB ("A" weighted) • Frequency level control range, switchable: $\pm 12\text{dB}$, $\pm 6\text{dB}$, $\pm 3\text{dB}$ • Crosstalk @ 1kHz, 0dBV*: greater than -85dB

• Power consumption: 6W • Power requirements: 100V, 50/60Hz; 120V, 50/60Hz; 220V, 50/60Hz; 240V, 50/60Hz • Dimensions: 480 x 188 x 342mm Type EIA-4U rack mount • Weight: 8.65kg 0dBV = 1Vrms
*Measured in EQUALIZE mode with all frequency controls at "0" (NORMAL mode specifications are slightly better).



PH-830

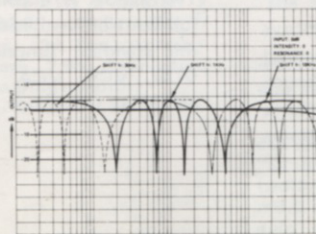
The PH-830 Stereo Phase Shifter provides an internal sweep oscillator with three waveform options for different phase effects and an LED for visual indication of the sweep frequency.

The shift frequency can be externally controlled with a control voltage (approx. 1V/8VA). A trigger input allows phase locking of the sweep oscillator to an external pulse. The sweep oscillator control of the right channel may be inverted manually or by remote control.

• Nominal input level, switchable: +20dBV, 0dBV, -20dBV • Input impedance: $50\text{k}\Omega$, unbalanced • Output impedance: 600Ω , unbalanced • Output level, switchable: 0dBV, -20dBV • Nominal control voltage input range: $\pm 5\text{V}$ • Control voltage input impedance: $100\text{k}\Omega$ • Minimum trigger input requirements: +10V, 2ms • Trigger input impedance: $50\text{k}\Omega$ • Frequency response: 10Hz-40kHz, +0dB, -1dB • Normal channel only: Harmonic distortion: less than 0.004% (1kHz, 0dBV) Signal/noise ratio: greater than 100dB ("A" weighted) Gain: 0dB, $\pm 1\text{dB}$ • Phase shift: 1440° • Center notch range: 30Hz (two channels in series) 10kHz (variable manually, automatically, or with external input) • Frequency control sensitivity: approx. 1V/8VA • Sweep oscillator range: 0.016Hz-10Hz • Phase shift signal/noise ratio: RESONANCE at "0": greater than -90dB, RESONANCE at "10": greater than



-85dB, ("A" weighted) • Crosstalk @ 1kHz, 0dBV: greater than -85dB • Power consumption: 12W • Power requirements: 100V, 50/60Hz; 120V, 50/60Hz; 220V, 50/60Hz; 240V, 50/60Hz • Dimensions: 480 x 136 x 342mm Type EIA-3U Rack mount • Weight: 7.5kg 0dBV = 1Vrms.



SH-7

SYNTHESIZER

Two VCO's for two-note chords plus a host of other professional features.



Play two notes simultaneously!

Since the SH-7 has two built-in VCO's, you can play two notes simultaneously. This feature, combined with the special richness of sound the SH-7 offers, gives you the effect of a considerably larger instrument!

External IN/OUT Jacks open up a world of possibilities.

The SH-7 has multiple IN/OUT jacks to greatly increase its versatility. For example, the SH-7 can be controlled from an external keyboard controller, an organ keyboard, a guitar synthesizer, or the Roland MicroComposer. And you can also control these same instruments from the keyboard of the SH-7. Because the SH-7's keyboard circuitry is based on one volt/one

octave, the SH-7 is compatible with most types of studio equipment and many stage-type synthesizers.

A host of other advanced features

The SH-7 also features an envelope-controlled VCF to give guitars a percussive rhythm effect or muting basses through an external microphone. The six-mode, multi-purpose bender allows variations of pitch, tone color and loudness during performances while a five-octave mixer lets you create a richer, fuller sound by modifying, individually or collectively, five bands from 2' to 32'. In short, the SH-7 provides one of the best and most versatile sounds ever in a portable synthesizer.

■ 44 keys, 3-1/2 octaves ■ VCO-1 (A/B) (upper note of two voice) ■ VCO-2 (lower note of two voice) ■ VCO-2 TUNING ■ AUTOBEND ■ AUDIO MIXER ■ NOISE GENERATOR ■ RING MODULATOR ■ HPF ■ VCF ■ VCA ■ ENV-1, 2 ■ Portamento ■ Transpose ■ Total Volume ■ Bender ■ TOTAL TUNING (±300 cents) ■ KEY MODE ■ S/H ■ LFO ■ CONNECTION JACKS ■ Output ■ Phones: 8 ohm, stereo ■ Pedal Control VCF ■ Ext. Signal Input ■ Ext. Input ■ Ext. CV Input ■ External Gate Input ■ Keyboard CV Output ■ Keyboard Gate Output ■ Output Level: L/M/H ■ Phones Output Level: L/M/H ■ Ext. Signal Input Level: L/M/H ■ Power Consumption: 22W ■ Dimensions: 870 (W) x 400 (D) x 180 (H)mm (34.3" x 15.6" x 7.1") ■ Weight: 15.5kg (34lbs.) ■ Accessory: 2.5m Connection Cord

SH-5

SYNTHESIZER

The complete combo synthesizer for stage or studio.



The SH-5 is a 44 key synthesizer, having all functions needed for a combo type synthesizer. Designed for professional players, the full control type synthesizer helps musicians create a rich sound environment with great versatility. The control panel is located at the

front, and controllers are independently located at the left side of the keyboard.

• Dimensions: 864(W) x 270/335 (D) x 257(H)mm (34" x 10.6/13" x 10.0") • Weight: 22kg (48.4lbs.) (including case) • Accessory: 2.5m Connection Cord (with pin plug adaptor)

SH-3A

SYNTHESIZER

Control-type versatility with unrivalled performance features.



The SH-3A is a compact, 44 key full control synthesizer featuring all the standard functions, including VCO, VCF, VCA, LFO, ADSR, and Noise Generator.

• Dimensions 1005(W) x 320(D) x 150(H)mm (39.6" x 12.6" x 5.9")/Weight 14.5kg (31.8lbs.)/Accessories: Music Rack, 2.5m Connection Cord (with pin plug adaptor).

SH-1 SYNTHESIZER

The compact synthesizer with "full-size" features.



The SH-1 . . . designed for compatibility and versatility.

The SH-1 doubles as either a complete synthesizer or as an expander module. In addition to its audio output, it features an audio input. Plus, it has both inputs and outputs for control voltage and gate. This means you can use the SH-1 to process an external audio signal, such as a guitar, through its filters and voltage controlled amplifier. And when you do, there's an envelope follower as in the SH-7, which opens the filter in proportion to how loud you play — sort of like an automatic waw effector. Second, you can play the SH-1 by remote from another synthesizer having a control voltage output.

Third, you can interface any other monophonic or polyphonic keyboard instrument with the SH-1; that instrument will not only be processed by the SH-1 but will trigger the SH-1's envelope generators.

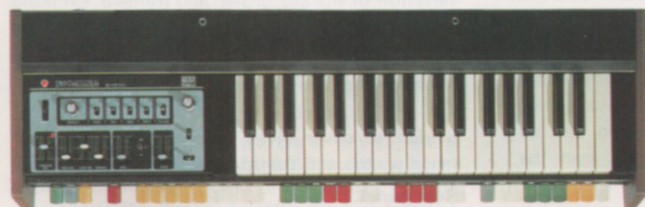
Everything you need in a small package

Including a complete set of external jacks, auto-bend with variable TIME and DEPTH controls, transpose to move the keyboard pitch up or down one octave and a bender which controls tone as well as pitch. Another "big synthesizer" feature is the sub-oscillator which adds a pitch either one or two octaves lower than the normal pitch for a fuller, foundier sound.

- 32 keys, 2-1/2 octaves ■ VCO ■ Sub-oscillator
- AUDIO MIXER ■ NOISE GENERATOR
- HPF ■ VCF ■ VCA ■ ENV-1 ■ ENV-1, 2
- Modulator ■ KYBD/Ext CV GATE Selector
- Total Tuning (± 700 cents or over) ■ Portamento
- Total Volume ■ Transpose ■ Bender
- CONNECTION JACKS • Output, Output Level: L/M/H • Phones: 8 ohm, stereo, Ext. Input, Ext. Control Voltage Input, External Gate Voltage Input • Keyboard CV Output • Keyboard Gate Output • Phones Output Level: L/M/H • Ext. Signal Input Level: L/M/H
- Power Consumption: 10W ■ Dimensions: 610(W) x 370(D) x 135(H)mm (24.0" x 14.6" x 5.3") ■ Weight: 6.4kg (14lbs.) ■ Accessory: 2.5m Connection Cord

SH-2000 PRESET SYNTHESIZER

30 preset sounds and complete effect control.



The SH-2000 is a compact 37 key synthesizer with 30 preset sounds. This unit enhances enjoyment of electronic organ performance with neither difficulty nor complexity.

- Dimensions 865(W) x 266(D) x 133(H)mm (34.0" x 10.5" x 5.2")/Weight: 11kg (24.2lbs.)/Accessories: Music Rack, 2.5m Connection Cord (with pin plug adaptor)

SH-1000 PRESET SYNTHESIZER

Modified control-type with 10 presets completes any combo.



The SH-1000 is a compact 37 key synthesizer full of originality combining control functions produce sounds freely with preset control to produce various musical instrument sounds at a touch of a finger.

- Dimensions: 865(W) x 260(D) x 150(H)mm (34.0" x 10.2" x 5.9")/Weight (Net): 12kg (26.5lbs.)/Accessories: Music Rack, 2.5m Connection Cord (with pin plug adaptor)

JUPITER-4

Four voice polyphonic synthesizer with computer

Roland's exciting new JP-4 has four independent synthesizer modules and a computer memory which allows you to patch, store, and recall up to eight different sounds at a finger's touch. You also have 10 preset sounds, including bass, strings, piano, sax, and trumpet, for a total of 18 sounds. Other features include 2-channel stereo effect and external control.

The JP-4 is a thoroughly professional unit, with all the advanced performance features which have made Roland a fixture on today's music scene.

Computer memory and complete control

For live performances, nothing is more important than fast, accurate patching. With the JP-4's programmable memory, you patch before you start playing . . . up to eight different sounds. Then, just push a button to recall any selection while playing. It's that fast and that simple. An automatically-recharged battery provides power to retain the memory contents when power is turned off.

Memory controls include a WRITE button for programming the sounds, MANUAL switch to bypass the memory and a special PROTECTION lock button to prevent accidental erasures.

ARPEGGIO selector/KEY ASSIGN MODE BUTTON

The ARPEGGIO selector allows automatic arpeggios of up to four octaves above the reference key (pressed key). The pattern follows the sequence of the pressed keys and has four modes: UP, DOWN, UP & DOWN, and RANDOM. The KEY ASSIGN MODE switch controls the four control function patterns of the synthesizer modules.

Programmable section with wide range of functions

The programmable section is the heart of the JP-4 and is equipped with a VCO, VCF, VCA, LFO, and noise generator.

VCO

The VCO is the synthesizer sound source. The frequency (or pitch) is controlled by a control voltage. Output waveforms include sawtooth, square, and pulse waves. The range selector allows transposing up or down one octave. When used with the sub-oscillator, which generates a 1-octave lower square wave, the sound becomes "fatter". A modulator is provided for vibrato, and a pulse width switch allows four values of the pulse width.

VCF

The VCF controls the timbre of the audio signals sent from the VCO. The high pass filter provides the various sounds required to duplicate clarinets, oboes and harpsichords. The low pass



filter produces soft timbres and resonance modifies certain sounds. The keyboard follower allows control of the VCF with the keyboard CV (control voltage), while the ASDR (envelope generator) can be used to impart tone color changes during the production of each note. A polarity switch is provided to change envelope polarities.

VCA

The VCA is used to give the output sound its final loudness pattern. A master volume control is provided for setting the output level of each patch so that when switching between sounds, the sound level remains the same.

LFO

The LFO output can be used to control the VCO, VCF, and VCA to produce vibrato, growl, and tremolo effects. The LFO speed can be controlled and waveform outputs can be modified.

Noise generator

The noise generator is used for special effects such as wind and waves.

Modifier section changes sounds

The modifier section allows manual variation of both memory and pre-set sounds.

Trigger section

This section includes an arpeggio rate varying function with an IN/EXT switch to allow synchronization of the arpeggios with an external

pulse. The VCF section has a sample and hold function using noise as a source, allowing random modulation of the cutoff frequency.

DELAY/BEND

The JP-4 can store LFO rate, waveform, and depth in its computer memory. LFO bend can be used to alter the LFO speed of the stored sounds. Other functions are delayed vibrato mode and a normal/wide changeover switch.

BEND/MODULATION

These allow manual variation of pitch, timbre and loudness. They can also be used for manual variation of vibrato, growl, and tremolo. Choking effects, such as used with electric guitars, are also possible.

8' basic range keyboard

The 49-key keyboard (4 octaves) can be extended to cover seven octaves using the VCO range switch and transpose switch.

Rear panel

The VCF control pedal jack can be used for foot-controlled wow effects. The external CLOCK IN jack can be used to synchronize arpeggios with an external pulse source such as a sequencer, the CR-68 Computer Rhythm, etc. It can also be used for synchronization of the VCF random modulation mode. There is also a jack for an expression pedal.

memory stores up to eight different selected sounds.



• Keyboard: 48 keys, 4 octaves, C scale ■ Synthesizer Modules • VCO (Voltage Controlled Oscillator): VCO range (16', 8', 4') 1/Waveforms (Δ , $\square$, $\sim$) 1/Pulsewidth (50%, 40%, 20%, 10%) and Pulsewidth LFO depth 1/PWM mode switch (MANUAL/LFO) 1/LFO modulation 1/Sub oscillator (1oct. down) 1 • Noise Generator: ON/OFF switch 1 • VCF (Voltage Controlled Filter): HPF cutoff (40Hz-5kHz) 1/LPF cutoff (20Hz-20kHz) 1/LPF resonance (0 ~ self oscillation) 1/KYBD follow (0%, 40%, 70%, 100%) 1/LFO modulation 1/ENV modulation 1/ENV polarity ($\sim$, $\wedge$) 1 • VCA (Voltage Controlled Amplifier): VCA out level 1/overload indicator 1 • LFO (Low Frequency Oscillator): Waveforms ($\sim$, Δ , $\square$, $\wedge$) 1/LFO rate (0, 1Hz-80Hz or more) 1/LFO rate indicator 1 • Envelope Generator for VCF and VCA 2: Attack time (0.6msec-3sec)/Decay time (14 msec-10sec)/Sustain level (0-100%)/Release time (14msec-10sec) ■ Modifier: Trigger generator • Trigger: Trigger rate (1Hz-25Hz) 1/Arpeggio select switch (IN, EXT) 1/VCF MOD select switch (IN, EXT) 1/VCF modulation 1 • Delay/Bend: Bend LFO rate 1/Bend LFO rate width (NORM, WIDE) 1/Delay time (0-10sec) 1 • Mode Select • Preset Select Switch (BASS, STRING, FUNKY CLAVI, PIANO, VOICE, TROMBONE, SAX, TRUMPET, SYNTH, THE FORCE) 10 • Compu Memory: Select switch 8/Manual switch 1/Protection switch 1/Memory write switch 1/Write indicator 2 (Back up battery built in) • Arpeggio & Key Assign: Arpeggio selector (UP, DOWN, UP & DOWN, RANDOM) 4/Key assign mode selector (UNISON I, UNISON II, POLY I, POLY II) 4 ■ Control • Controller: Portamento (0-1sec/1oct.) 1/Portamento switch (ON/OFF) 1/Transpose (NOR-

MAL-1oct. DOWN) 1/LFO modulation 1/Bend sensitivity 1 (VCO: $\pm$ oct. or more) (VCF: $\pm$ 2 oct. or more resonance pitch) (VCA: $\pm$ 12dB or better)/LFO/OFF/BEND switch 3/Manual lever 1 • Tuning ($\pm$ 50 cent $\pm$ 1%) 1 • Ensemble (ON-OFF) 1 • Hold (ON-OFF) 1 • Connections: Output jack (Mono, Stereo) 2/Output level switch (H position at 4 sound outputs: 0dBm standard) 1/Headphone jack (Stereo type) 1/Headphone level switch 1/External control input jack (Damper DP-1) (VCF FV-2) (EXP FV-2: 0 ~ -30dB) (External clock: OFF . . . 0V, ON . . . 1V pulse minimum) 4 • Power Consumption: 30W • Dimensions: 946(W) x 410(D) x 179(H)mm (37.3" x 16.2" x 7.1") • Weight: 19kg (41.8lbs.) • Accessories: 2.5m connection cord 2



OPTIONS

- MR-5 Music Rest
- KS-20 Keyboard Stand
- FV-2 Foot Volume
- DP-1 Pedal Switch

RS-505

The paraphonic strings that gives you the

The new RS-505 combines rich string sounds with a synthesizer and a bass section. These three sections can be played either separately or together. Each section has controls for both the UPPER and LOWER portions of the split keyboard.

String section

Produces natural string sounds with variable attack time. The 4' and 8' sound level ratio is variable.

Synthesizer section

Easy selection between UPPER and LOWER keyboard control of 4', 8', and 16' sounds (16' in LOWER only with low-pitch priority). Also includes a built-in ensemble effect.

Bass section

With the LOWER keys (low-pitch priority), three different bass sounds are available: contrabass, tuba, and cello. Ensemble effect can be added to the bass sound and the sound can be shaped by an AR (Attack Release) envelope generator.

A full range of controls for a full range of sounds

Ensemble I provides minor harmonics with only

a touch of vibrato. Ensemble II offers full-bodied strings. Ensemble III gives the sounds a special wide, radiating effect.

Vibrato depth and modulation depth can be controlled and LFO rate and delay time can be controlled for both vibrato and growl. The release control works for both synthesizer and string sections.

Free pitch shift

With the pitch shift, pitch can be moved up and down at will, with automatic rise-up when desired. Three modes are available: manual, automatic, and pedal. The pitch slider is located at the front for convenience. Pitch set determines variable pitch width and time control determines pitch shift duration.

Six octaves from 49 keys

The 49-key keyboard provides six full octaves by means of tablets and is split into UPPER and LOWER sections at middle C. Bass tablets function only in the LOWER keys.

Rear panel

AUDIO out jack allows connection with guitar amp, mixer, audio amp, etc. Audio level control allows changeover of output level according to input sensitivity. EXT IN jack is used to add an ensemble effect to external inputs. TRIGGER GATE OUT allows control of the envelope



generator by an external synthesizer. Pitch shift, sustain, and VCF can be controlled externally with the DP-1 pedal switch and FV-2 foot volume pedal.

RS-09

Roland RS-09 Organ Strings. It's in a class by itself.

No other electronic instrument made by any other maker anywhere in the world offers the combination of versatility and sound of Roland's dramatically new RS-09.

This advanced keyboard instrument is both an electronic organ and an electronic strings, with a broader range of control over both sounds than most individual units. With its 44-key keyboard, separate string and organ sections, envelope control, vibrato and ensemble, it provides musicians a scope that before could only be duplicated with two or more instruments. And despite its wealth of functions, the RS-09 is available at a surprisingly low cost.

A full set of sliding controls allows fast, easy mixing of 8', 4', 2' and 1' notes. Attack time is continuously variable for strings and both strings are organ sounds work with sustain and ensemble effects.

The two channel output allows contouring the sound field with an external PA or audio system for a wide-spreading stereo effect. An EXT AUDIO IN terminal permits direct connection of a guitar or microphone to the ensemble modulator section to add even more versatility. The RS-09 can also be connected directly to an external synthesizer and effect units. Light and compact, the RS-09 is fully portable



and is available with an optional stand, foot pedal and other fine Roland accessories.

• Keyboard (44 key, 3-1/2 octave) • Strings section: Strings tablet (8', 4'), Ensemble ON/OFF switch, Attack time • Organ section: mixing volume (8', 4', 2', 1') Organ ON/OFF tablet, Tone switch, Ensemble ON/OFF switch • Envelope control: Release time, Release mode switch • Vibrato control: Delay time, rate, depth • Ensemble mode switch • Tone control • Volume • Transpose switch • Tuning (± 35 cent) • Power switch • Power Indication

LED • Connection terminal: Output x 2 (stereo), Output level switch (L = -30dBm/M = -15dB m/H = 0dBm), Headphone (for 8 Ω stereo), Organ RAW signal output (Max. 0.5Vp-p), Gate output (OFF = 0V, ON = +14V), Sustain pedal connection, external signal input, external signal level switch (L = 0dBm/M = -20dBm/H = -40dBm) • Power consumption: 15W • Dimension: 676(W) x 102(H) x 306(D)mm (26.6" x 4.0" x 12.1") • Weight: 7.3kg (16.1lbs.) • Accessory: 2.5m connection cord x 2

range of a symphony orchestra.



- Keyboard: 48 keys, 4 octaves, C scale
- String Section: Tone tablet (Upper string, lower string) 2/4'8' mix control (upper, lower)/Attack control 1
- Synthesizer Section: Tone tablet (upper 4', upper 8', lower 4', lower 8', bass 4', bass 8', bass 16') 6/Control tablet (ensemble) 1/VCF control (cutoff frequency, ENV, LFO) 4/Envelope generator (attack time, decay time, sustain level, release time) 4/Second touch switch 1
- Release Control: String + synthesizer 1
- Bass Section (Bass priority): Tone tablet (cello 8', tuba 16', contrabass 16') 3/Control tablet (ensemble) 1/Attack control 1/Release control 1
- Balance (String synthesizer, bass volume) 2
- Ensemble Mode Switch 1
- Vibrato Depth 1
- LFO Control (Rate, Delay time) 2
- Tuning (± 50 cent or more) 1
- Master Volume 1
- Pitch Shift Control: Pitch slider 1/Pitch cent (1oct. or more) 1/Time 1/Pitch mode switch (Auto, off, external control manual)
- Ensemble Tone (on the rear panel) 1
- Power Switch 1
- Connections: Audio out jack (monaural, stereo, synthesizer + bass) 3/Output level switch (H: 0dBm/imp. 6.3k Ω , M: -15dBm/imp. 8.6k Ω , L: -30dBm/imp. 2.2k Ω) (0dBm = 0.75Vrms, max. 10Vp-p) 2/Gate voltage output jack (OFF: 0V, ON: +15V) 1/Trigger signal output jack (OFF: 0V, ON: +15V pulse 2msec) 1/External input jack (max. -20dBm) 1/External control jack (VCF FV-2, Sustain, Pitch DP-1) 3
- Power consumption: 12W
- Dimensions: 905(W) x 370(D) x 145(H)mm (35.6" x 14.6" x 5.7")
- Weight: 14kg (30.8lbs.)
- Accessories: 2.5m connection cord 1/Pedal switch (DP-1) 1/Note stand 1/Carrying case CB-5 (option)

RS-202 STRINGS

For a rich ensemble of brass and strings.

A More Functional Combo Keyboard

Roland Strings RS-202, an electronic keyboard with 61 keys, can produce both string and brass ensemble sounds.

Adding to the functions of the first Roland Strings (RS-101), the RS-202 comes equipped with an ensemble selection switch, vibrato delay time control slider and gate output for connection to a synthesizer, allowing you to make your musical performance more colorful and expressive.

Ensemble Selection Switch

The ensemble selection switches permit the combination of any of the three voicings: I (deep), II (shallow) and OFF. The keyboard is split so the upper and lower portions can have different voicings.

Controllable vibrato Delay Effect

One of the new features is the Vibrato Delay time control which allows free control of the amount of time between key depression and the start of the vibrato effect.

Synthesizer Control via the RS-202 Keyboard

The gate output in the output section lets you use the VCF, VCA, and ADSR of an external synthesizer to alter the RS-202 sounds for greater freedom of expression.



- Dimensions: 910(W) x 360(D) x 163(H)mm (35.8" x 14.0" x 6.4")
- Weight: 17kg (37.4lbs.)
- Accessories: Music Rack, Connection Cord (2.5m with pinplug adaptor)

MP-600

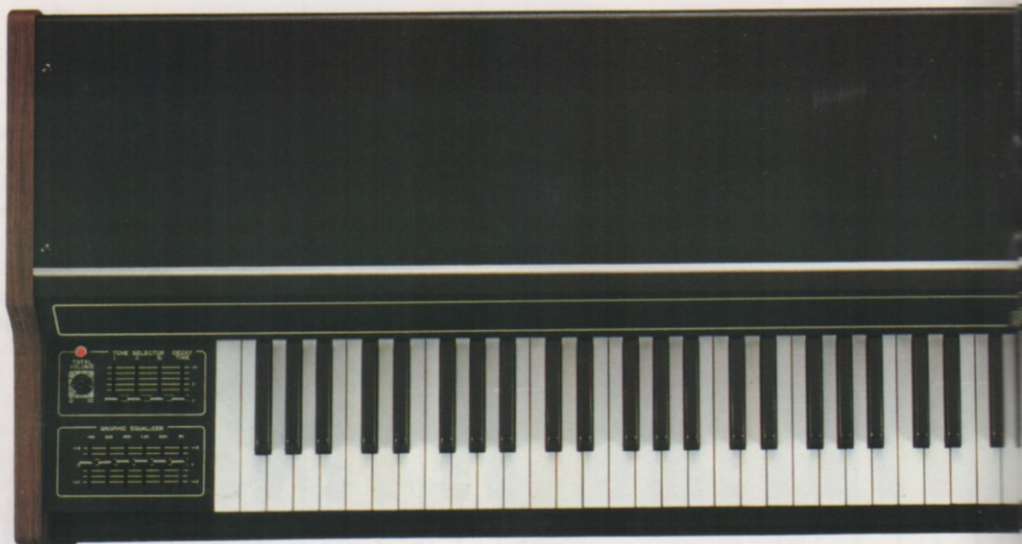
COMBO PIANO

Ideal for live performances.

The MP-600 is a 64-key electronic piano with a weight-balance key action and a more natural piano sound. Three different basic sounds are available: soft piano, bright piano, and clavichord.

The 6-band graphic equalizer allows a $\pm 12\text{dB}$ variation of six frequency ranges from 100Hz to 5kHz. Decay time is variable. By using different settings, a wide variety of sounds can be created. Equipped with a headphone jack for rehearsing and private practice. All controls use sliders for fast, positive settings.

- Keyboard: 64 keys, E1-G6
- Tone Selector: I . . . Soft piano sound, II . . . Bright piano sound, III . . . Clavichord piano
- Effect Control: Decay time, Tune (± 30 cent), Graphic equalizer (6 elements: $\pm 12\text{dB}$ at 100, 300, 600, 1.2k, 2.5k, 5k)
- Output: Damper/Signal out (H, L)/Phone
- Power Consumption: 15W
- Weight: 23kg (50.6lbs.)
- Dimensions: 1125 (W) x 132 (H) x 470 (D)mm (44.3" x 5.2" x 18.5")
- Options (sold separately): CB-6 (carrying case)/DP-5 (damper pedal)



MP-700

COMBO PIANO (with stand; amplifier sold separately)

High performance combo piano with superior versatility plus Roland's original Touch-Sense Key action.

The MP-700 employs an LSI electronic generator system in the sound source and a hammering key action. A variety of performance modes, a split keyboard, and the rugged construction of MP-700 will fully satisfy the requirements of professional keyboard players.

In addition to piano and harpsichord sounds, it combines a new function Accent to enable percussive effect of quick response that are essential for jazz and rock.

Further Bass tablet produces bass guitar sound from registers on two lower octaves and Bass Mute tablet changes the sound to that of double bass.

Make the best use of these excellent functions and create your own progressive music.

- Keyboard: 75 keys (F1-G7)
- Dimensions: 1280 (W) x 245 (H) x 610 (D)mm (50.4" x 9.6" x 24.0")
- Weight: 54kg (119lbs.)
- Power consumption: 15W
- Attachments: Stand KS-70; 2.5m connection cord; Vinyl cover



The MPA-100 piano amplifier rated at 120Wrmp for the MP-700 is available.

EP-30 COMBO PIANO

The portable electronic piano with touch sense.



The Roland EP-30 is a portable combo type electronic piano built into its own rugged carrying case. It goes where you go. With its touch sense it expresses what you want to express. Or you can cancel the touch sense with the flick of a switch. Need some really low bass? Punch the Bass button and you have it: bass in the lower 19 keys with its own separate volume control so you can get just the balance you want.

<Use KS-10 or KS-40 Keyboard Stand>

• 61 Keys (F scale) • Dimensions: 900(W) x 300(D) x 150(H)mm (35.4" x 11.8" x 5.9")/ Weight 14.5kg (31.9lbs.)/Accessories: Cover, Pedal Switch (DP-1), Music Rack, 2.5m Connection Cord with pin plug adaptor)

EP-20 COMBO PIANO

Compact electric with superb combo performance.



The Roland Electronic Piano EP-20 is a combo-type piano combining excellent portability and practical design.

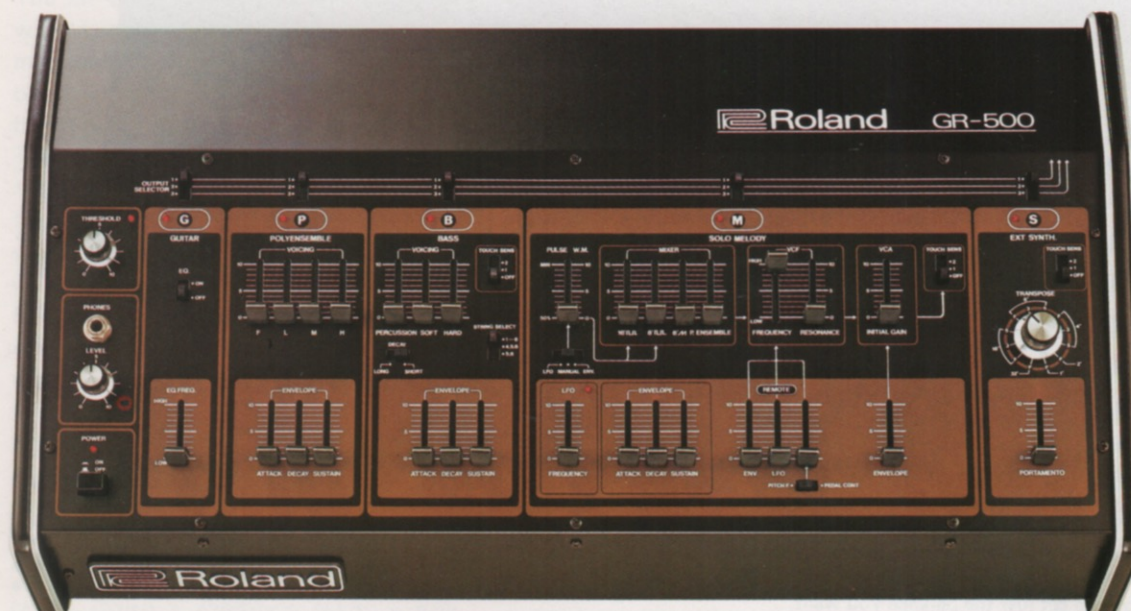
<Use KS-10 or KS-40 Keyboard Stand>

• 61 Keys (F scale) • Dimensions: 1030(W) x 270(D) x 130(H)mm (37" x 9.7" x 4.7")/ Weight 15kg (33lbs.) • Accessories: Cover, Pedal Switch (DP-1), 2.5m Connection Cord (with pin plug adaptor), Music Rack

GUITAR SYNTHESIZER

At Last-the Ultimate Musical instrument.

GR-500 Synthesizer Unit



The Roland Guitar Synthesizer consists of two units. The guitar looks, feels, plays and functions much like any solid, high-quality guitar with two pickups (one humbucking).

The guitar plugs into a synthesizer unit which can be placed on a stand or the top of an amp, near the guitarist. The connecting cable has 24 conductors, making it possible for the guitarist to control, from the guitar, many functions normally found on a synthesizer.

The second pickup on the guitar is a special **divided pickup**. It is actually six small pickups—one for each string—each sending its own signal to the synthesizer section. This enables you to select different sounds for each string.

Once the signals reach the synthesizer control unit, you can begin to synthesize sounds. Generally you work from left to right on the control panel when making adjustments.

The first section you come to on the panel is the **Guitar Section**. This controls normal guitar sound through equalization. Because the control unit has **three outputs**, it is possible to select which output any particular sound will be channeled to. Imagine you are using three Roland JC amplifiers . . . one on the left of the stage, one in the center, and one on the right. You would probably want the regular guitar sound to come from the center amp. You therefore set the channel selector of the Guitar Section to the output which feeds the center amp. Further adjustment of the sound can be made at the amp.

The next section on the control unit is the **Polyensemble Section**. It provides sounds similar to woodwinds, brass, soft reeds, and such solo effects as a harpsichord or human voice. The Polyensemble Section operates much like a conventional, polyphonic synthesizer. All the guitar strings will cause synthesized sound to be produced. Plus, you can bend strings as much as you like and the synthesized sounds will follow beautifully.

The **Bass Section** is next. Its controls, which include envelope adjustments, enable you to get sounds that closely resemble string bass, electric bass, strings or tuba.

The **Solo Melody Section** gives you solo sounds that can be shaped with square and sawtooth waves, VCF's, VCA's and envelope controls, just like in conventional synthesizers. Here again synthesized sounds follow your note-bending techniques with no problem.

The **External Synthesizer Section** lets you control other synthesizers. By connecting a larger synthesizer, you can create sounds that are truly incredible. Because Roland believes in compatibility between synthesizers, the possibilities are endless.

You really have control of your sound when you play a GR-500. The control panel is simple to operate, and all of the sounds are available at the flick of a switch on the guitar. For example, imagine a four-piece group—three guitars and drums. At the beginning, the lead guitarist wants a really raunchy sound. He flicks a switch

on the GR-500, activating the Guitar Section. An adjacent, rotary knob changes the tone. This control is far more powerful than any tone controls built into a guitar before. It controls an equalizer on the control unit. When the guitarist comes to a solo, he wants a heavier sound. He flicks on the Bass Section. In addition to his raunchy lead, he's delivering a thundering bass in unison. The bass player plays a counterpoint and it really sounds very heavy. The lead player is using three independent amps with the GR-500 . . . the lead coming from center-stage. But when he activates the Bass Section, the bass sound comes from the far right . . . another instrument "seems to appear from nowhere."

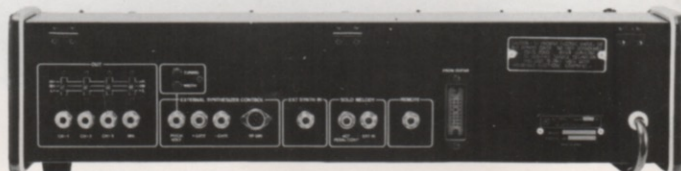
For the next part of the number, the thundering bass on the right disappears and a dreamlike chorus of sound from the Polyensemble Section comes from left-stage . . . blending beautifully with guitar sound from center-stage. All of these changes are made from the guitar.

There is one very important feature of the GR-500 that deserves to be emphasized. The GR-500 gives you **infinite sustain**. Some people spend the price of a GR-500 just trying to get that single effect.

At last . . . an instrument that requires no "inspiration from the gods." You are in complete control. You are the creator . . . the GR-500 definitely will set your creativity free. There is no other instrument like it.

KS-10A Stand (Option)

GR500 Rear Panel



Specially Designed Neck

Guitar/Synthesizer Changeover Switch

Portamento ON/OFF Switch

Remote Switch

Humbucking Pickup

Divided Pickup

Bridge, Tailpiece

Polyensemble Volume and ON/OFF Switch

Guitar Volume Control

Bass Volume and ON/OFF Switch

Guitar Tone Control

Solo-Melody Volume and ON/OFF Switch

Guitar Equalizer

External Synthesizer Volume Control and ON/OFF Switch

Master Volume

Connector

VK-9

ORGANS

The super organ for super pros.

Never before have so many features been brought together in a portable organ for professional keyboardists. Until now, the measure of versatility and convenience afforded by the VK-9 necessitated numerous and substantial modifications of "home style" organs. Roland has designed the VK Combo Organs exclusively to meet the needs of the contemporary traveling keyboardist. Within minutes of seating yourself at the VK, you will feel right at home. Nearly every idea desired by leading musicians throughout the world has been provided for. You must do more than read about the amazing new Roland VK Combo Organs. And you must do more than merely hear them. You must actually play them to begin to realize how carefully they were planned . . . how painstakingly they were designed . . . and how perfectly they were built.

Drawbars I, II, III, IV control either keyboard. Drawbar pitches include 16', 12-4/5', 5-1/3', 8', 4', 2-2/3', 2', 1-3/5', 1-1/3' and 1'.

External Synthesizer Interface. You can trigger notes on an external synthesizer simply by playing those notes on the upper keyboard of the VK Organ. Portamento controls located at the organ keyboard include PORTAMENTO OFF/TIME, and a FLYBACK-UP/OFF/DOWN Selector to obtain portamento on either ascending or descending intervals.

All bass (pedal) tones playable on lower keyboard. And all lower keyboard tones may be played on the bass pedals. Independent bass envelope controls let you get punchy string bass and electric bass effects.

Silent, electronic presets. Featuring LED indicators, these presets select either drawbars or pre-set sounds; pre-set sounds are easily changed by the keyboardist.

Sustain, Percussion, Vibrato. Different sustain times and vibrato/chorus settings may be selected. Available percussion harmonics include "2nd," "3rd," and "5th." Also featured is "CLICK ATTACK," a sharp, almost percussive keyboard response.

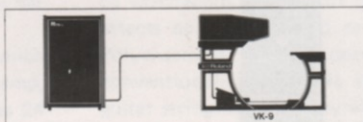
External Speaker Controls Built-In. All controls for Revo or Leslie speakers are conveniently located at the keyboard. Fully Portable. Integral carrying case with detachable cover and carrying handles.

Overhanging Keyboard. Your playing posture is much more comfortable since the upper 61-note keyboard hangs over the other.

Optional Pedalboard Module. This 25-pedal module is simply positioned where most comfortable and plugged in.

More. There are other features, like the Master Volume Control located at the keyboard. It lets you pre-set the maximum volume level you wish to reach, allowing you full use of the volume pedal. There's a Tune Control at the keyboard also, so you can quickly tune the organ to other instruments. And separate IN/OUT Jacks for each keyboard facilitate using any of the hundreds of available sound modification devices with the Roland VK Organ.

Connection of Revo Sound System and organ

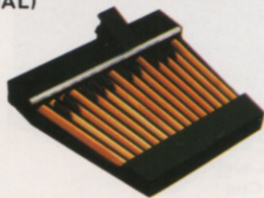




• **KEYBOARD** Upper manual: 61 notes (C scale), Lower manual: 61 notes (C scale), Pedalboard: 25 notes (C scale)
 • **MANUAL DRAWBAR:** I, II, III, IV, each with, 6-2/5' (I only), 16', 5-1/3', 8', 4', 2-2/3', 2', 1-3/5', 1-1/3', 1'
 • **BASS DRAWBAR:** Flute 16', 8'; Bright 8' • **PRESET** Upper manual: I - Chime; II - Trumpet; III - Full Tibias; IV - Theater Brass, Lower manual: I - Dulciana; II - Open Diapason; III - Full Accompaniment; IV - Bombarde * Each timbre is readjustable. • **PERCUSSION:** Click attack; Decay fast; 2ND (4'); 3RD (2-2/3'); 5TH (1-3/5'); Volume soft • **EXTERNAL SYNTHESIZER** PORTAMENTO: Time; Flyback • **UPPER SUSTAIN** I, II • **PERCUSSION/SUSTAIN SELECTOR** • **BASS:** Lower To Pedal; Pedal To Lower; Envelope I, II • **REVO CONTROL:** Revo (Leslie) Cancel; Chorus; Slow; Fast • **VIBRATO:** Chorus/Vibrato; Depth I, II, VIBRATO & REVO: Lower; Upper
CONNECTION SOCKETS: • **OUTPUT:** Revo (8P); Leslie (9P); Normal; Bass • **EXTERNAL EFFECTS:** Upper (Send/Return), Lower (Send/Return), Bass (Send/Return) • **EXTERNAL INPUT:** Before Expression; After Expression • **EXTERNAL SYNTHESIZER CONTROL JACKS:** KCV/GATE • **OTHERS:** Brilliance; Pedal Connector; Output Level Changeover Switch; Drawbar Selector (I, II, III); Volume; Organ Tune; Power Switch • **POWER CONSUMPTION:** 37W • **DIMENSIONS:** 1,290 (W) x 270/1,000 (H, excl/incl stand) x 745 (D) mm (50.8" x 10.6/39.4" x 29.4") • **WEIGHT:** 72.6kg (160lbs.) • **ACCESSORY:** Exclusive stand

VKP-9

(PEDALBOARD & EXPRESSION PEDAL)



• **KEYBOARD:** 25 notes (C scale)
 • **DIMENSIONS:** 1025/750 (W) x 145/102 (H) x 930 (D) mm (40.3/29.6" x 5.7/4.2" x 36.6") • **WEIGHT:** 45kg (99lbs.)

VKB-9

(BENCH)



• **ASSEMBLED DIMENSIONS:** 1,080 (W) x 95/180 (H) x 400 (D) mm (42.5" x 3.7/7.1" x 15.8") • **WEIGHT:** 10.5kg (23.2lbs.)

VKE-1

(EXPRESSION PEDAL)



• **Dimensions:** 158(W) x 95/180(H) x 290(D)mm (6.2" x 3.7"/7.1" x 9.5")

MR-1

(MUSIC REST)



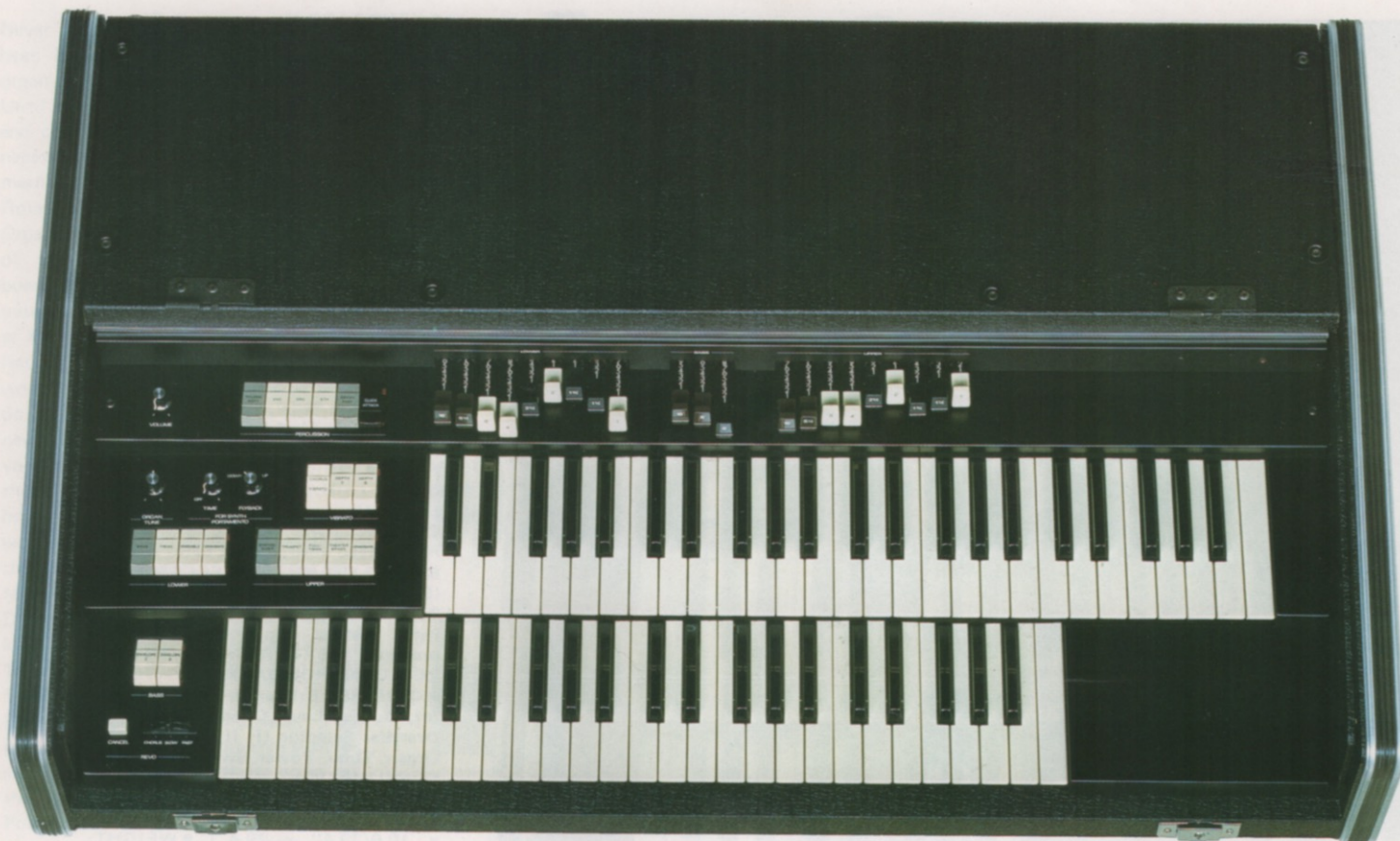
VKA-1

VKA-1 is an adaptor to connect Revo 120/250 or Leslie speakers to VK organ.

VK-6

ORGANS

Outstanding sound at an understanding price.



While the VK-6 lacks the overall range of the VK-9, it does offer the touring pro an array of features usually found only on studio models. These include separate drawbar sets for bass and upper and lower keyboards, dual 49-note keyboards, independent 13-note pedalboard and much, much more.

And despite its economical price, the VK-6 shares such advanced VK-9 systems as separate bass envelope, 6-stage percussion, and external synthesizer adaptability. All controls are arranged for maximum convenience while a complete set of input and output jacks makes the VK-6 compatible with almost any combo arrangement. Weighing less than 60kg, the VK-6 and its accessories fit easily on the rear seat of a car. Total portability and almost complete performance versatility. You have both with the new Roland VK-6. The competitively-priced portable that outperforms the competition.

- Fully portable; integral carrying case with detachable cover and carrying handles
- An external synthesizer may be played remotely and simultaneously with notes played on the upper manual
- Two 49-note keyboards; overhanging keyboard design for most comfortable playing posture
- Independent bass envelope section for punchy string bass and electric bass effects
- Independent, optional 13-note pedalboard module with plug-in cable and connector
- All bass sounds playable on the lower keyboard
- All external speaker controls built-in at the keyboard
- MASTER VOLUME and TUNE Controls at the keyboard

• **KEYBOARD** Upper manual: 49 notes (C scale), Lower manual: 49 notes (C scale), Pedalboard: 13 notes (C scale)
 • **MANUAL DRAWBAR UPPER, LOWER:** 16', 5-1/3', 8', 4', 2-2/3', 2', 1-3/5', 1-1/3', 1' • **BASS DRAWBAR:** Flute 16', 8'; Bright 8' • **PRESET** Upper manual: Synthesizer, Trumpet, Full Tibias, Theater Brass, Drawbars, Lower manual: Bass, Tibias, Ensemble, Drawbars • **PERCUSSION:** Click attack; Decay fast; 2ND (4'); 3RD (2-2/3'); 5TH (1-3/5); Volume soft • **EXTERNAL SYNTHESIZER PORTAMENTO:** Time; Flyback • **BASS:** Envelope I, II • **REVO CONTROL:** Revo (Leslie) Cancel; Chorus, Slow; Fast • **VIBRATO:** Chorus/Vibrato; Depth I, II
CONNECTION SOCKETS • **OUTPUT:** Revo (8P); Leslie (9P); Normal; Bass • **EXTERNAL INPUT:** Before Expression; After Expression • **EXTERNAL SYNTHESIZER CONTROL JACKS:** KCV/GATE • **OTHERS:** Output Level Selector Switch; Brilliance; Pedal Connector; Power Switch • **POWER CONSUMPTION:** 30W • **DIMENSIONS:** 1,280 (W) x 265/900 (H, excl/incl stand) x 670 (D) mm (50.5" x 10.4/35.5" x 26.4") • **WEIGHT:** 57.8kg (127lbs.)

REVO SOUND SYSTEMS

The new drift in acoustics...Rotary sound plus chorus sound combined in the Revo Sound System.

Electronic rotary sound; no mechanical parts to wear out. Use with any organ or other keyboard instrument. The Revo Sound System includes chorus effects for better stereo sound. You sound great even in a room with bad acoustics!

RD-155L/W

- Output: Revo channel 70Wrms, Direct channel 90Wrms
- Tone Control: Revo channel, Treble 1, Bass 1, Direct channel, Treble 1, Bass 1
- Reverb Control: 1
- Fast Speed Control: 1
- Resonance Changeover Switch (0, 1, 2): 1
- Piano/Organ Changeover Switch: 1
- Speaker: 20cm 4, 38cm (bass, R&P) 1
- Connector: Input connector (8P) 1, Extension output connector (8P) 1
- Pilot Lamp: 1
- Power Consumption: 1W
- Dimensions: RD-155L 635(W) x 530(D) x 950(H)mm (25" x 20.9" x 37.4"), RD-155W 640(W) x 540(D) x 905(H)mm (25.2" x 21.3" x 35.7")
- Weight: 60kg (132lbs.)
- Accessory, Connection cord, C-5A (5m cable): 1

RD-155W Furniture Type Wood Cabinet



RD-155L



RD-125L Leatherret Cabinet Stage Type



- Output: Revo channel 55Wrms, Direct channel 75Wrms
- Tone Control: Revo channel, Treble 1, Bass 1, Direct channel, Treble 1, Bass 1
- Reverb Control: 1
- Fast Speed Control: 1
- Resonance Changeover Switch (0, 1, 2): 1
- Speaker: 20cm 3, 30cm (bass) 1
- Dimensions: 630(W) x 450(D) x 750(H)mm (24.8" x 17.7" x 27.6")
- Weight: 45kg (99lbs.)
- Accessory, Connection cord, C-5A (with 8-P connector): 1

In addition, Roland also offers the stage-type Revo 250 and RD150L/W stage and home-type models, similar to the RD-155 series but with a normal 38cm woofer in place of the 38cm R&P speaker.

RD-150W



- Output: Revo channel 70W (rms), Direct channel 90W (rms)
- Dimensions: RD-150L, 635(W) x 950(H) x 530(D)mm (25.0" x 37.4" x 20.9"), RD-150W 660(W) x 900(H) x 540(D)mm (26.0" x 35.4" x 21.3")
- Weight: RD-150L/RD-150W 60kg (132lbs.)
- Accessory: 5m connection cable (C-5)

Revo250



- Channels: 3
- Revo Channel: 90W (rms)
- Direct Channel: 120W (rms)
- Dimensions: 700(W) x 520(D) x 1090(H)mm (27.6" x 20.5" x 42.9")
- Weight: 80kg (176lbs.)
- Accessory: Connection cord, C-5A (5m cable)

Revo30

Big Revo Sound for the Home Organ.

Roland's Revo-30 System is a highly developed compact version of our popular Big Sound Revo System.

Add depth, quality and effect to the sound of electronic organs. Just connect the Revo 30 directly to the organ speaker and enjoy new dimensions in musical sound.



"Jazz Chorus"...good enough for the best.

JC-200^{R&P}



200W power and new R&P speakers for bolder Jazz Chorus effects.



This professional system puts out an awesome 200Wrms (100Wrms per channel) with the second channel equipped with a chorus effect for a deeper, wider-ranging sound. Controls, jacks and construction are all top-line. The special 30cm R&P speakers (JS-200S) have an extremely high acoustic efficiency, up to twice as much as many conventional types. Feature for feature this system can stand comparison with any in the world. And it's rapidly becoming one of today's most acclaimed amplifiers for lead guitars.

- Output: 200W (rms) into 4Ω x 2
- Speaker: 30cm x 4 (JC-200S x 2)
- Channel: 2
- Input jack: High/Low x 2
- Controls: Volume x 2, Treble x 2, Middle x 2, Bass x 2, Distortion, Reverb, Vibrato speed, Vibrato depth
- Switches: Bright x 2, Chorus/off/Vibrato, Power
- Jacks: AC outlet, Footswitch (Chorus/Vibrato, Reverb, Distortion), Speaker system (JC-200S), Line-out
- Power consumption: 175W
- Dimensions: JC-200; 770(W) x 220(H) x 360(D)mm (30.3" x 8.7" x 12.8"), JC-200S; 890(W) x 675(H) x 360(D)mm (35.0" x 26.6" x 14.5")
- Weight: JC-200; 25kg (55.2lbs.), JC-200S; 41kg x 2 (90.5lbs. x 2), Total; 107kg (236.2lbs.)
- Accessory: Vinyl cover

JC-120A^{R&P}

The same great effects as the JC-200 at 120W output.



- Output: 120W (rms)
- Speaker: 30cm x 2
- Channels: 2
- Input jacks: High/Low x 2
- Controls: Volume x 2, Treble x 2, Middle x 2, Bass x 2, Distortion, Reverb, Vibrato speed, Vibrato depth
- Switches: Bright x 2, Chorus/Vibrato, Power
- Jacks: Foot Switch (Chorus/Vibrato, Reverb, Distortion), External speaker x 2, Line-out
- Unswitched AC socket
- Power consumption: 120W
- Dimensions: 774(W) x 634(H) x 270(D)mm (30.5" x 25" x 10.6")
- Weight: 40kg (88lbs.)
- Accessory: Vinyl cover

JC-60A^{R&P}

A compact, lightweight performer with a single speaker and 60W output.



- Output: 60W (rms)
- Speaker: 30cm x 1
- Channels: 1
- Input jacks: High/Low
- Controls: Volume, Treble, Middle, Bass, Distortion, Reverb, Vibrato speed, Vibrato depth
- Switches: Bright, Chorus/Vibrato, Power
- Jacks: Foot Switch (Chorus/Vibrato, Reverb, Distortion), External speaker, Line-out
- Unswitched AC socket
- Power consumption: 70W
- Dimensions: 624(W) x 530(H) x 255(D)mm (24.5" x 20.9" x 10")
- Weight: 26kg (57lbs.)
- Accessory: Vinyl cover

The all-time favorites.

JC-160

Four 25cm speakers for greater dynamic range on stage.



- Output: 120W (rms) • Speakers: 25cm x 4
- Channels: Normal, Effect • Input Jacks: 2 (High/Low) • Controls: Volume, Treble, Middle, Bass, Distortion, Reverb, Vibrato Speed, Vibrato Depth, Chorus/Vib. Changeover Switch • Power Switch • Foot Switch Jacks: Chorus/Vib., Reverb • Output Jacks: Ext. Speaker 2 (8Ω), Line Out • Power Consumption: 400VA • Dimensions: 750(W) x 240/300 (D) x 700(H)mm (30.0" x 9.4/11.8" x 27.6") • Weight: 35kg (77lbs.) • Accessory: Vinyl Cover

JC-120

Twin 30cm speakers and separate normal and effect channels.



- Output: 120W (rms) • Speakers: 30cm x 2
- Channels: Normal, Effect • Input Jacks: 2 (High/Low) • Controls: Volume, Treble, Middle, Bass, Distortion, Reverb, Vibrato Speed, Vibrato Depth, Chorus/Vib. Changeover Switch • Power Switch • Foot Switch Jacks: Chorus/Vib., Reverb • Output Jacks: Ext. Speaker 2 (8Ω), Line Out • Power Consumption: 400VA • Dimensions: 750(W) x 240/270(D) x 540(H)mm (30.0" x 9.4/10.6" x 21.3") • Weight: 28kg (61.6lbs.) • Accessory: Vinyl Cover

JC-80

Mid-range amp with rich, full tones and 38cm speaker.



- Output: 60W (rms) • Speakers: 38cm x 1
- Channels • Input Jacks: 2 (High/Low) • Controls: Volume, Treble, Middle, Bass, Distortion, Reverb, Vibrato Speed, Vibrato Depth, Chorus/Vib. Changeover Switch • Power Switch • Foot Switch Jacks: Chorus/Vib., Reverb • Output Jacks: Ext. Speaker 1 (8Ω), Line Out • Power Consumption: 200VA • Dimensions: 600(W) x 225/255(D) x 600(H)mm (23.6" x 8.9/10.0" x 23.6") • Weight: 22kg (48.4lbs.) • Accessory: Vinyl Cover

JC-60

Compact, 60W single-channel amp with all standard JC features.



- Output: 60W (rms) • Speakers: 30cm x 1
- Channels • Input Jacks: 2 (High/Low) • Controls: Volume, Treble, Middle, Bass, Distortion, Reverb, Vibrato Speed, Vibrato Depth, Chorus/Vib. Changeover Switches • Power Switch • Foot Switch Jacks: Chorus/Vib., Reverb • Output Jacks: Ext. Speaker 1 (8Ω), Line Out • Power Consumption: 200VA • Dimensions: 600(W) x 225/255(D) x 480(H)mm (23.6" x 8.9/10.0" x 18.9") • Weight: 20kg (44lbs.) • Accessory: Vinyl Cover

JC-50

Smallest 50W JC Series Amp with a 30cm speaker.



- Output: 50W (rms) • Speaker: 30cm x 1
- Channel: 1 • Input jacks: High/Low • Controls: Volume, Treble, Bass, Distortion, Reverb, Vibrato speed, Vibrato depth • Switches: Bright, Chorus/Vibrato, Power • Jacks: Foot-switch (Chorus/Vibrato, Distortion, Reverb), Headphones • Power consumption: 44W • Dimensions: 548(W) x 506(H) x 239(D)mm (21.6" x 19.9" x 9.4") • Weight: 18kg (40lbs.) • Accessory: Vinyl cover

Multiple effects and the great R&P sound in a single, compact package.

GA-120^{R&P}

Top-of-the-line GA series amp with a full range of effects and new R&P 30cm speaker.



The GA-Series is almost identical to the JA-Series, lacking only the Jazz Chorus effect. Both of these top-performing units use Roland's famous R&P speakers for a bolder, stronger sound. Standard features include 6-band graphic equalizer, separate tone controls for treble, mid-range and bass, compressor, equalizer, reverb and removable casters for easy handling.

- Output: 120W (rms)
- Speakers: 30cm x 2
- Input jacks: High/Low/Line
- Controls: Overdrive (w. ON/OFF switch), Volume (w. Pull — Bright-On switch), Treble, Middle Bass, Reverb, Master volume
- Equalizer: 6 bands (100Hz, 300Hz, 600Hz, 1.2kHz, 2.5kHz, 5kHz), Level control, ON/OFF switch
- Foot Switch jacks: Reverb, Overdrive, Equalizer, Compressor
- Jacks: Line-in, Line-out, Headphones, External speaker
- Unswitched AC socket
- Power consumption: 120W
- Dimensions: 743(W) x 644(H) x 291(D)mm (29.2" x 25.4" x 11.5")
- Weight: 40kg (88.5lbs.)
- Accessory: Vinyl cover

GA-60^{R&P}

Compact 60W amp with R&P speaker.



- Output: 60W (rms)
- Speaker: 30cm x 1
- Input jacks: High/Low/Line
- Controls: Overdrive (w. ON/OFF switch), Volume (w. Pull — Bright-On switch), Treble, Middle Bass, Reverb, Master volume
- Equalizer: 6 bands (100Hz, 300Hz, 600Hz, 1.2kHz, 2.5kHz, 5kHz), Level control, ON/OFF switch
- Foot Switch jacks: Reverb, Overdrive, Equalizer, Compressor
- Jacks: Line-in, Line-out, Headphones, External speaker
- Unswitched AC socket
- Power consumption: 70W
- Dimensions: 648(W) x 570(H) x 291(D)mm (25.6" x 22.5" x 11.5")
- Weight: 28kg (62lbs.)
- Accessory: Vinyl cover

GA-120

120W amp with overdrive, bright, switch and 6-bands graphic equalizer.



- Output: 120W (rms)
- Speakers: 30cm x 2
- Input jacks: High/Low
- Controls: Overdrive, Volume, Treble, Middle, Bass, Reverb, Master volume
- Equalizer: 6 elements (100Hz, 300Hz, 600Hz, 1.2kHz, 2.5kHz, 5kHz), Level control, ON/OFF switch
- Jacks: Foot Switch (equalizer, reverb, overdrive), Line-in, Line-out, Headphones, External speaker
- Unswitched AC socket
- Power consumption: 120W
- Dimensions: 707(W) x 604(H) x 291(D)mm (27.9" x 23.8" x 11.5")
- Weight: 26kg (57.5 lbs.)
- Accessory: Vinyl cover

GA-60

60W version of the GA-120.



- Output: 60W (rms)
- Speaker: 30cm x 1
- Input jacks: High/Low
- Controls: Overdrive, Volume, Treble, Middle Bass, Reverb, Master volume
- Equalizer: 6 elements (100Hz, 300Hz, 600Hz, 1.2kHz, 2.5kHz, 5kHz), Level control, ON/OFF switch
- Jacks: Foot Switch (equalizer, reverb, overdrive), Line-in, Line-out, Headphones, External speaker
- Unswitched AC socket
- Power consumption: 70W
- Dimensions: 588(W) x 490(H) x 284(D)mm (23.2" x 19.6" x 11.2")
- Weight: 28kg (62lbs.)
- Accessory: Vinyl cover

The basic guitar amp that gets better with age.

GA-50

The most versatile amp in its class.



- Output: 50W (rms) • Speaker: 30cm x 1
- Input jack: High/Low • Controls: Volume, Treble, Bass, Booster, Reverb, Distortion, Bright • Foot Switch jacks: Booster, Reverb, Distortion • Headphones jack: 1 • Power consumption: 43W • Dimensions: 515(W) x 518(H) x 235(D)mm (20.3" x 20.4" x 9.3")
- Weight: 16kg (35lbs.) • Accessory: Vinyl cover

GA-40

40W rating and integrated bright switch for sharp sounds.



- Output: 40W (rms) • Speaker: 30cm x 1
- Input jacks: High/Low • Controls: Volume, Treble, Bass, Reverb, Distortion, Bright • Foot Switch Jacks: Reverb, Distortion • Headphones jack: 1 • Power consumption: 40W • Dimensions: 480(W) x 500(H) x 200(D)mm (18.9" x 19.7" x 7.9")
- Weight: 12kg (26.5 lbs.) • Accessory: Vinyl cover

GA-30

30W output with built-in reverb and distortion unit.



- Output: 30W (rms) • Speaker: 30cm x 1 • Input jacks: HIGH/LOW • Controls: Volume, Treble, Bass, Reverb, Distortion • Output jacks: Reverb Foot Switch, Headphone • Power consumption: 37W • Dimensions: 485(W) x 430(H) x 200(D)mm • Weight: 10kg • Accessory: Vinyl cover

GA-20

Light weight 20W amp with full controls.



- Output: 20W (rms) • Speaker: 30cm x 1
- Input jacks: HIGH/LOW • Controls: Volume, Treble, Bass, Reverb, Distortion • Output jacks: Reverb Foot Switch, Headphone • Power consumption: 27W • Dimensions: 400(W) x 445(H) x 200(D)mm (15.7" x 17.5" x 7.9")
- Weight: 9kg (19.8lbs.) • Accessory: Vinyl cover

The bass amps with a big difference.

SB-200 BASS AMPLIFIER

Premier bass amp with 6 bands graphic equalizer, 200W output and back loaded horn speaker.



What the JC-200 does for lead guitars, the SB-200 does for basses. This 200Wrms monster combined with its special 38cm R&P speaker can fill any hall with a powerful, clear bass. An integrated 6-band equalizer allows shaping the response to individual performing styles. Built rugged to take the hard knocks of stage performances and touring, this unit offers bass guitarist more sound and a more versatile sound than any conventional unit now on the market.

SB-200

- Output: 200W (rms) into 4Ω • Input jack: High/Low/Line • Control: Volume/Treble/Middle/Bass • Equalizer: 6 Bands (55Hz, 150Hz, 300Hz, 600Hz, 1.2kHz, 2.4kHz), Level control, ON/OFF switch • Output jack: Exclusive speaker/External speaker/Line • Connection jack: AC outlet, Footswitch • Power consumption: 175W • Dimensions: 690(W) x 205(H) x 310(D)mm (27.2" x 8.1" x 12.2") • Weight: 21kg (46lbs.) • Accessory: Vinyl cover

SB-200S

- Enclosure: V type, front-loaded horn • Speaker: 38cm x 2, NEW R&P (C-1238B) • Impedance: 4Ω • Power handling capacity: 240W (rms) • Dimensions: 810(W) x 1210(H) x 510(D)mm (31.9" x 47.6" x 20.1") • Weight: 80kg (177lbs.) • Accessory: Vinyl cover

SB-100

100W integrated amp with all the SB-200's advanced features.



The SB-100 is a new combination bass amplifier incorporating a 6 bands graphic equalizer ranging from 75Hz to 2.4kHz.

The new 38cm R&P speaker in the SB-100 can handle inputs of 100 watts and produces ample lows through the cabinet combining both the advantages of back-loaded horn and bass-reflex systems.

The Power amplifier is designed to produce soft distortion sound with ultra-powerful inputs, for a fuller, more natural sound.

In order to guarantee sufficient rigidity and durability, hard fiber board strips are used for all edges of the cabinet. Two casters are provided for easy movement.

- Output: 100W (rms) • Speaker: 38cm x 1 (R&P) • Input jacks: High /Low/Line • Control: Volume/Treble/Middle/Bass/Equalizer Level/Band Level 75Hz-150Hz-300Hz-600Hz-1.2kHz-2.4kHz • Equalizer ON/OFF switch • Output jacks: Internal speaker/External speaker/Line • Power consumption: 120W • Dimensions: 840(W) x 680(H) x 428(D)mm (33.1" x 26.8" x 16.9") • Weight: 45kg (99lbs.) • Accessory: Vinyl cover



Lightweight bass amps with a heavy sound.

GB-50 **R&P**

Super bass amp with advanced R&P speaker system.



- Output: 50W (rms) • Speaker: 38cm R&P x 1
- Input jacks: High/Low • Controls: Volume, Treble, Bass, Bass booster • Jack: Headphones
- Power consumption: 43W • Dimensions: 540 (W) x 740(H) x 275(D)mm (21.3" x 29.2" x 10.8") • Weight: 31kg (68.5lbs.) • Accessory: Vinyl cover

GB-50

Big 38cm speaker and bass booster for 50W output.



- Output: 50W (rms) • Speaker: 38cm x 1
- Input jacks: High/Low • Controls: Volume, Treble, Bass, Bass booster • Jack: Headphones
- Power consumption: 43W • Dimensions: 518 (W) x 638(H) x 274(D)mm (20.4" x 25.2" x 10.8") • Weight: 24kg (53lbs.) • Accessory: Vinyl cover

GB-30

Compact bass amp with a full 30W output.



- Output: 30W (rms) • Speaker: 30cm x 1
- Input jacks: High/Low • Controls: Volume, Treble, Bass, Bass booster • Jack: Headphones
- Power consumption: 37W • Dimensions: 443 (W) x 544(H) x 254(D)mm (17.5" x 21.4" x 10") • Weight: 16.5kg (36.3lbs.) • Accessory: Vinyl cover

R&P SPEAKERS

Top-line speakers for a dynamic, professional sound.

• High-quality Sound

Light and sturdy paper cones and special treatment at the cone edge supports give proper damping to the large metallic dome 100mm diameter. It produces dynamic and voluminous sound.

• Reliable Design For Powerful Input And Output

Heat generated by large inputs is absorbed and radiated efficiently through the radiating fins at the basket and the bottom of the yoke by high-speed air flow which is produced by cone movement. Double spiders which suspend the front and rear ends of the voice coil, and cloth edge support which contains a special damping agent are employed to give stable performance at high input levels.

A large, powerful Alnico V-type magnet, yoke material with little magnet loss, and edgewise-wound aluminum ribbon wire achieve an admirably high sensitivity characteristic: 104 dB/W at 1m (Model C-2038B).

C-1230



- Diameter: 30cm • Impedance: 8Ω • Bass Resonance (f_0): 50Hz • Frequency Response: 50-6000Hz • Power Handling Capacity: 120W (rms) • Characteristic Sensitivity: 100dB/W at 1m • Gap Flux Density: 11280 gauss • Total Magnetic Flux: 219500 maxwell • Magnet: 725/1.6g/lbs. • Voice Coil Diameter: 48/1.9 mm/in. • Q_0 : 0.39 • Dimensions: 310 x 115 mm DIA. x mm H 12.2 x 4.5in. DIA. x in. H • Weight: 6.8/15.0kg/lbs.

C-1238B



- Diameter: 38cm • Impedance: 8Ω • Bass Resonance (f_0): 42Hz • Frequency Response: 40-3000Hz • Power Handling Capacity: 120W (rms) • Characteristic Sensitivity: 99dB/W at 1m • Gap Flux Density: 10150 gauss • Total Magnetic Flux: 247000 maxwell • Magnet: 725/1.6g/lbs. • Voice Coil Diameter: 48/1.9 mm/in. • Q_0 : 0.37 • Dimensions: 390 x 138 mm DIA. x mm H 15.4 x 5.4in. DIA. x in. H • Weight: 7.6/16.8kg/lbs.

C-2038



- Diameter: 38cm • Impedance: 8Ω • Bass Resonance (f_0): 50Hz • Frequency Response: (f_0): 10000Hz • Power Handling Capacity: 200W (rms) • Characteristic Sensitivity: 104 dB/W at 1m • Gap Flux Density: 13300 gauss • Total Magnetic Flux: 292000 maxwell • Magnet: 1700/3.8 (Alnico V) g/lbs. • Voice Coil Diameter: 100/3.9mm/in. • Q_0 : 0.4 • Dimensions: 406 x 187mm DIA. x mm H 16.0 x 7.4in. DIA. x in. H • Weight: 11.8/26.0kg/lbs.

C-2538B



- Diameter: 38cm • Impedance: 8Ω • Bass Resonance (f_0): 50Hz • Frequency Response: f_0 -10000Hz • Power Handling Capacity: 250W (rms) • Characteristic Sensitivity: 101dB/W at 1m • Gap Flux Density: 13300 gauss • Total Magnetic Flux: 292000 maxwell • Magnet: 1700/3.8 (Alnico V) g/lbs. • Voice Coil Diameter: 100/3.9mm/in. • Q_0 : 0.4 • Dimensions: 406 x 187mm DIA. x mm H 16.0 x 7.4in. DIA. x in. H • Weight: 12.0/26.5kg/lbs.

Round out you sound with a Roland Cube.

CUBE-60



Tough, portable and versatile, Roland's Cube Series use special, high-efficiency speakers for a sound that surpasses their size. Use them with any guitar, with their dual overdrive/normal

inputs. Separate controls are provided for volume, treble, mid-range, bass reverb and master volume. A complete array of input and output jacks are standard.



- Output: 60Wrms • Speaker: 30cm x 1 • Input jack: Overdrive/Normal • Control: Overdrive/Volume/Treble/Middle/Bass/Reverb/Master Volume • Footswitch jack: Overdrive, Reverb • Jacks: Pre-out, Main-in, Headphone, Ext. Speaker • Power consumption: 230VA • Dimensions: 375(W) x 435(H) x 235(D)mm (14.8" x 17.1" x 9.3") • Weight: 13.5kg (29.7 lbs.) • Accessory: Vinyl Cover

CUBE-40



- Output: 40Wrms • Speaker: 25cm x 1 • Input jack: Overdrive/Normal • Control: Volume/Treble/Middle/Bass/Reverb/Master Volume • Footswitch jack: Reverb • Pre-Out jack • Main-In jack • Headphones jack • External speaker jack • Power consumption: 36W • Dimensions: 310(W) x 368(H) x 205(D)mm (12.2" x 14.5" x 8.1") • Weight: 10.5kg (23lbs.) • Accessory: Vinyl cover

CUBE-20



- Output: 20Wrms • Speaker: 20cm x 1 • Input jack: Overdrive/Normal • Control: Volume/Treble/Middle/Bass/Reverb/Master Volume • Headphones jack • Power consumption: 17W • Dimensions: 290(W) x 323(H) x 175(D)mm (11.4" x 12.7" x 6.9") • Weight: 8kg (17.6 lbs.) • Accessory: Vinyl cover

ROLAND EFFECTORS

The easy way to mellow sounds.

AP-7 JET PHASER



The JET PHASER/AP-7 is a phase shifter producing dynamic jet sounds for rock guitars.

• Changeover Switches: Effect/Normal, Fast/Slow • Controls: Jet level, Mode Selector (Jet 1,2,3,4/Phase 1,2), Resonance, Slow rate • Batteries (006P : 9V) • Dimensions: 252 (W) x 170 (H) x 70 (D) mm (9.92" x 6.65" x 2.75") • Weight: 1600g (3.52lbs.)

AP-2 PHASE TWO



PHASE II/AP-2 is a compact phase shifter with simplified controls, including a "Resonance" control for enhancing the phase effect.

• Effect/Normal Changeover Switch • Controls: Rate, Resonance • Batteries (006P : 9V) • Dimensions: 62 (W) x 115 (H) x 205 (D) mm (2.44" x 4.52" x 8.07") • Weight: 850g (1.87lbs.)

Expands the total effect.

AF-100 BEE BAA



The AF-100 is Roland's number one fuzz unit, providing a wide range of fuzz control.

• Changeover Switch: Effect / Normal, Fuzz & Treble booster, Fuzz tone • Knobs: Fuzz sustain, Fuzz tone, Fuzz volume, Treble booster volume • Battery: 006P (9V) • Dimensions: 230 x 165 x 65 mm (9.1" x 6.5" x 2.6") • Weight: 1050g (2.31lbs.)

AF-60 BEE GEE



The AF-60 is a compactly designed fuzz unit with "Tone" and "Out level" controls and a Fuzz/Normal changeover switch.

• Changeover Switch: Fuzz / Normal • Control Knobs: Tone, Out level • Battery: 006P (9V) • Dimensions: 62 x 115 x 205 mm (2.5" x 4.5" x 8.1") • Weight: 850g (1.87lbs.)

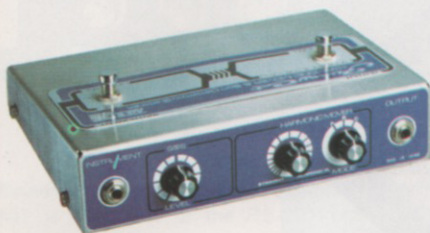
AS-1 SUSTAINER



The AS-1 is a unique sustainer which sustains the original sound without distortion, unlike fuzz effect distortion sustainers.

• Changeover Switch: Sustain / Normal • Control Knobs: Sustain, Out level • Batteries: 006P (9V) • Dimensions: 62 x 115 x 205 mm (2.5" x 4.5" x 8.1") • Weight: 850g (1.87lbs.)

AG-5 FUNNY CAT



The AG-5 provides both auto-wah and soft distortion effects simultaneously or separately.

• Changeover Switches: SDS / Normal, Harmonic mover / Normal • Control Knobs: SDS level, Harmonic mover effect, Harmonic mover mode changeover switch (3 steps: A, B, and C) • Battery: 006P (9V) • Dimensions: 230 x 165 x 65 mm (9.1" x 6.5" x 2.6") • Weight: 1050g (2.31lbs.)

AD-50 DOUBLE BEAT



The AD-50 combines fuzz and wah effects, and wah effects.

• Changeover Switches: Wah / Normal, Fuzz / Normal • Control Knobs: Fuzz sustain, Fuzz out level, Fuzz tone selector • Battery: 006P (9V) • Dimensions: 80 x 160 x 275 mm (3.2" x 6.3" x 10.8") • Weight: 1850g (4.07 lbs.)

AW-10 WAH BEAT



The AW-10 is a highly dependable wah-pedal providing sharp sound change.

• Changeover Switch: Wah / Normal • Battery: 006P (9V) • Dimensions: 80 x 110 x 275 mm (3.2" x 4.3" x 10.8") • Weight: 1380g (3.04lbs.)

RE-301 ECHO CHAMBER

The professional echo with sound-on-sound, chorus, and reverb.



The most advanced Roland Echo Chamber, the RE-301 gives you total performance versatility. Change effects instantly, give even small rooms auditorium-like acoustics, make a six-string guitar sound like a 12-string or create delays of up to 30 seconds with its exclusive sound-on-sound feature.

And it's all so easy with the RE-301. This sophisticated echo/reverb/chorus unit lets you control and mix sounds at will. Its Chorus Section turns solos into a chorus by broadening the sound through a BBD delay line. These and many other creative possibilities open up when you hook into the RE-301, the echo chamber that makes all others seem old-fashioned.

In addition to the echo function (which immediately follows the "live" sound), the recorded sound can be reproduced after a specific time delay, whose duration is variable from 10-30 seconds per tape rotation on manual control, and can also be controlled with the **Echo Repeat Rate**. This unique sound-on-sound function lets you record "live" onto the play back from 10-30 seconds after it's actually input.

- Input: 3 channels, VU meter and peak level indicator
- Input impedance: 50k Ω , 2k Ω with input selector at -50dB
- Input level: Changeable: -20dB/-35dB/-50dB
- Output: 2 channels or 1 channel
- Output level: Changeable: -15dB/-25dB/-35dB
- S/N: -75dB (with all input VOLUMES at minimum, all effects ON, and all effect VOLUMES at maximum when noise reduction circuit is working)
- Effects:
 - Chorus Effect ON indicator, ON/OFF switch with optional remote control
 - INTENSITY control
 - Echo Effect ON indicator, ON/OFF switch with optional remote control
 - MODE selector, with 6 modes, VOLUME control, INTENSITY control, REPEAT RATE control with optional remote control, Sound-on-sound ON/OFF switch with optional remote control, SINGLE DELAY/ECHO switch
 - Reverberation VOLUME control
 - Tone controls: BASS, TREBLE (Controls effects sound only)
- Power consumption: 22W
- Dimensions: 415 (W) x 190 (H) x 300 (D) mm (16.3" x 7.5" x 11.8")
- Weight: 10kg (22lbs.)
- Accessories: Connection cord x 2, endless tape (RT-1L), cleaner, vinyl cover.

RT-1L



A specially designed heavy duty tape with a long life for use in the RE series Echo Chambers.



RE-201

ECHO CHAMBER

Our most popular echo.



With its three independent input channels, each with separate volume controls, three-spring reverb, free running tape system to reduce wow and flutter and 12-mode (4 echo, 7 reverb/echo, 1 reverb effect) selection, the RE-201 offers serious musicians maximum creative control with its host of design and engineering refinements. **Echo Repeat Rate, Echo Intensity and Echo Volume** are all variable. Bass and treble

Echo Tone can be set without affecting the original sound. Rugged, reliable and versatile, the RE-201 is Roland's most popular echo chamber, used by professionals through the world.

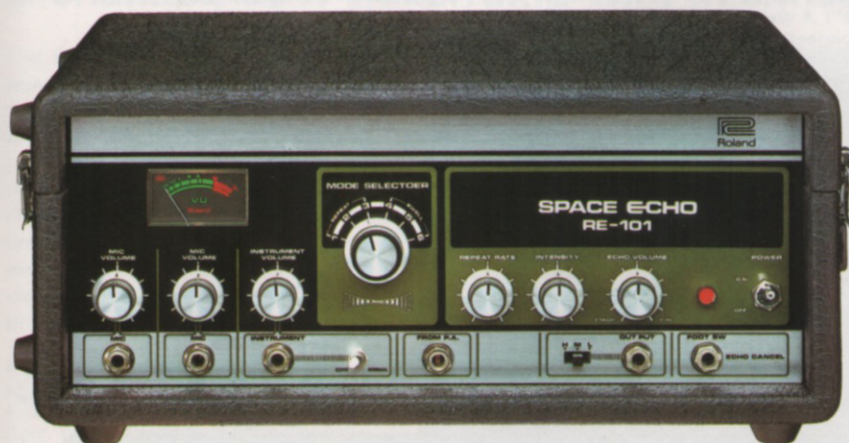
- Channel: 3 Channels • Input: Microphone, Instrument, From PA • Output: Output jack, Output level change switch, Foot switch jack • Control: Mode selector (Rotary type 12-mode), Repeat rate, Intensity, Echo volume (Treble, Bass, Reverb Volume) • Other:

- ers: Level meter (incorporates lamp inter-locking foot switch), LED Indication Type Peak Level meter, Instrument channel Echo/Normal changeover switch, Power switch, Erase head, Record: 1 head, Playback: 3 heads • Motor: Electronic servo direct drive • Power consumption: 14W • Dimensions: 415 (W) x 275 (D) x 185 (H) mm (16.3" x 10.8" x 7.3") • Weight: 9.5kg (20.9lbs.) • Accessories: Connection cord x 2, foot switch (FS-1), endless tape (RT-1), cleaner, vinyl cover.

RE-101

ECHO CHAMBER

All the features you need at a price you can afford.



Roland's basic echo chamber, the RE-101 is the same as the RE-201 but without the reverb unit or echo tone controls. The free running tape system reduces wow and flutter. Six different echo modes are available. Plus separately controlled inputs for microphones and instruments. And like all Roland echo chambers. RE-101 has variable **Echo Repeat Rate, Echo Intensity and Echo Volume** controls,

FROM PA output and foot switch jacks, full size level meter and a tough, portable case.

- Channel: 3 Channels • Input: Microphone, Instrument, From PA • Output: Output jack, Output level change switch, Foot switch jack • Control: Mode selector (Rotary type 6-mode), Repeat rate, Intensity, Echo volume • Other: Level meter (incorporates

- lamp interlocking foot switch), Instrument channel Echo/Normal changeover switch, Power switch Erasing head, Record: 1 head, Playback: 3 heads • Motor: Electronic servo direct drive • Power consumption: 14W • Dimensions: 415 (W) x 275 (D) x 185 (H) mm (16.3" x 10.8" x 7.3") • Weight: 9.2kg (20.3lbs.) • Accessories: Connection cord x 2, foot switch (FS-1), endless tape (RT-1), cleaner, vinyl cover.

An entirely new concept in echo chambers.

DC-30

Analog chorus/echo for an exciting new range of effects and superior tonal quality.

Roland's revolutionary DC Series use solid-state IC circuitry to eliminate the tape and simplify operation. The result is no more troublesome tape changing and a fidelity so remarkable they can be used with the finest home stereo system. Since the analog echo concept has no moving parts, reliability is virtually total. Yet you have even more versatility than the most advanced conventional units

- Input jacks: 2 (Mic, Mic/Instrument) • Output jack: 2 • Footswitch jack (Effect on/off): 1
- Foot control jack (echo repeat rate): 1 • Controls: Input volume control x 2, Chorus intensity, Echo repeat rate, Echo intensity, Echo volume, Tone control • Selectors: Input level 3-step changeover switch, Output level 2-step changeover switch, Effect mode changeover switch (Chorus/Off/Echo) • Level indicator: 2 (Normal/Green, Peak/Red) • Input sensitivity/impedance: -50dB (3.16mV)/4.7k Ω , -35dB



- (17.8mV)/470k Ω , -20dB (100mV)/470k Ω • Output level: -20dB (100mV), -35dB (17.8mV) • Output impedance: less than 600 Ω • Chorus delay time: 22mS-44mS • Echo delay time/Bandwidth: 40mS/10kHz-600mS/

- 1.5kHz (Bandwidth is variable with delay time) • Power consumption: 6W • Dimensions: 386(W) x 123(H) x 206(D)mm (15.2" x 4.9" x 8.1") • Weight: 3.7kg (8.2lbs.) • Accessory: Connection cord (2.5m)

DC-20

2-Channel Electronic Echo . . . Simplified operation and never needs a tape change.



- Input jacks: 2 • Output jacks: 2 • Footswitch jack: 1 • Controls: Input volume, Repeat rate, Echo volume, Intensity • Level selectors: Three positions input level, two positions output level • Peak level indicator: 1 • Delay time: 20ms-400ms • Bandwidth: 10kHz-1.5kHz • Input

- impedance: -50dB/4.7k Ω , -35dB/470k Ω , -20dB/470k Ω • Output impedance: under H.L/1k Ω • Power consumption: 5W • Dimensions: 340(W) x 95(H) x 291(D)mm (13.4" x 3.7" x 11.5") • Weight: 2.8kg (6.2lbs.) • Accessories: Connection cord 2.5m

DC-10

An entirely new concept in echo chamber design.



- Dimensions: 340(W) x 95(H) x 160(D)mm (13.4" x 3.7" x 6.3") • Weight: 2.8kg (6.2lbs.) • Accessory: Connection cord (2.5m)

DC-50

Solo "duets".

DC-50's Hall Echo effect provides 'big auditorium' dynamic reverberation.



- Dimensions: 366(W) x 148(H) x 245(D)mm (14.4" x 5.83" x 9.65") • Weight: 4kg (8.8lbs.) • Accessory: Connection cable (2.5m)

RV-100

The studio reverb for microphones, turntables, tape decks and other components.

This superbly-engineered unit offers optimum fidelity for studio work. A unique limiter circuit provides clear, clean reverb for increased spatial depth and improved frequency response. It works equally well for monaural or stereo, while a separate pan pot control allows manual setting for special emphasis when desired.

- Dimensions: 340(W) x 95(H) x 165(D)mm (13.8" x 3.7" x 6.5") • Weight: 2.6kg (5.7lbs.) • Accessory: Connection Cord 2.5m



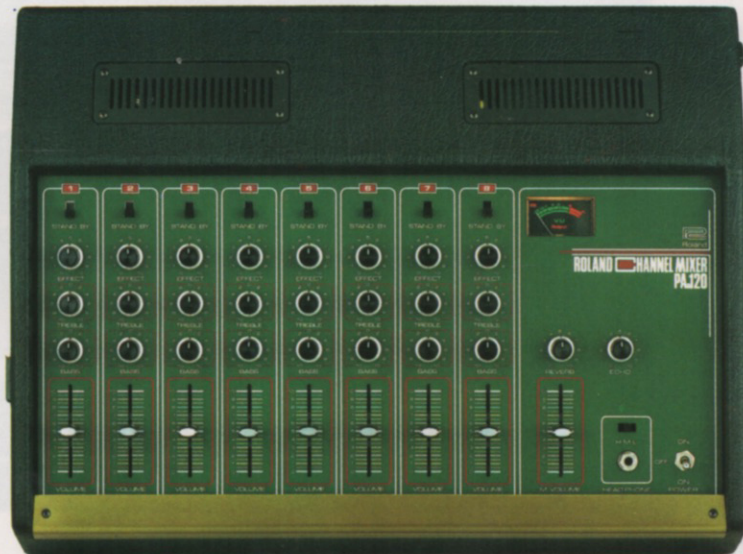
Feature-packed PA Mixer/Amps.

PA-120 P.A.MIXER

8-channel PA mixer with reverb/echo and powerfull 120W amp.

The Roland PA-120 public-address system is an 8-channel mixing amplifier system combining a 120W (RMS) main amplifier and reverb unit, capable of handling a 100W (RMS) speaker system in which 6 speakers of 20 cm each are incorporated. Connecting two PA-120 units together makes it possible to expand easily into a 16-channel system or a high-power 240W (RMS) system.

- Inputs (8-channel system): Mic. Channels (low impedance) • Channel Controls: Volume, Effect, Bass, Treble, Stand-by • Main Controls: Main Volume, Echo, Reverb, Headphone (with volume change-over switch: 3-step change-over L/M/H), Power Switch • Output Jacks: Speakers (12Ω — 8Ω: parallel), Headphone, Line out, Mixer out • Effective Output (RMS): 120W (6Ω load) • Peak Power: 240W (6Ω load) • Others: AC Outlet 1, Jacks for Echo Chamber 2, VU meter 1 • Power Consumption: 600VA • Dimensions PA-120: 551 (W) x 390 (D) x 170/78 (H) mm (21.7" x 15.4" x 6.7/3.1") • Weight PA-120: 17kg (37.4lbs.) • Accessories: Vinyl cover

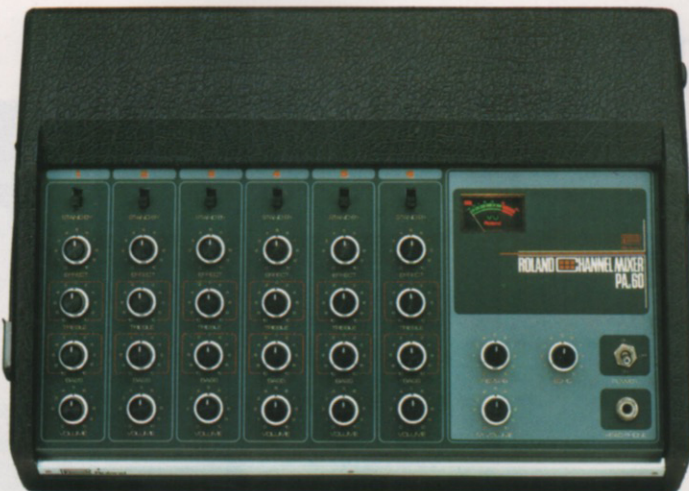


PA-60 P.A.MIXER

6-channel, 60W mixer/amp with mic/instrument changeover switch.

The Roland PA-60 public address system is a 6-channel mixing amplifier system combining a 60W (RMS) main amplifier and reverb unit, capable of handling a 40W (RMS) speaker system with three 20 cm speakers. Of the six channels, channels 5 and 6 are equipped with a microphone/line change-over switch which make it possible to use sound sources other than microphones.

- Inputs (6-channel system): Microphone Channels (low impedance) • Channel Controls: Volume, Effect, Bass, Treble, Stand-by • Main Controls: Main Volume, Echo, Reverb, Power Switch • Output Jacks: Speakers (24Ω — 12Ω: parallel), Headphone, Line-out • Effective Output (RMS): 60W (12Ω load) • Peak Power: 120W (12Ω load) • Others: AC outlet, Echo chamber terminals, VU meter, Microphone/line change-over switches • Power Consumption: 200VA • Dimensions: PA-60: 451 (W) x 300 (D) x 149/8 (H) mm (17.8" x 11.8" x 5.9/0.3") • Weight PA-60: 10kg (22lbs.) • Accessories: Vinyl cover 1



VX-120

VOCAL AMPLIFIER

120W stereo mixing amp with chorus effect and electronic echo.

The VX-120 is a 6-channel, dual-output vocal amplifier with 120W rms (60W + 60W) of power and an integrated electronic echo/chorus effect.

All channels are equipped with panpots to freely position the sound in the stereo field. Channels 1 and 2 are provided with input selectors and channels 3 to 6 are provided with 3-step input attenuators. It is also possible to connect effects units, tuner, record players, etc. The power can be reinforced by linking it with external power amplifiers. Two speakers per channel can be driven.

The completely electronic echo unit has no moving, mechanical parts to guarantee high reliability without the need for tape replacement and other complicated maintenance.



- Output: 120Wrms (60W + 60W), into 8Ω load for both channels.
- Input channels: 6
- Inputs: H Imp Mic / L Imp Mic / L Gain, H Imp Mic / Aux / Phono, Effect return
- Controls: Panpot, Effect volume, Treble, Bass, Channel volume
- Main controls: Master volume, Balance, Echo repeat rate, Echo intensity, Effect level

- Switches: Stand-by switch, Input selector (3-position), Input attenuator (3-position), Effect selector, Effect pan switch
- Outputs: Speaker output, Line out, Effect send
- Power consumption: 130W
- Dimensions: 425 (W) x 305 (H) x 305 (D) mm (16.7" x 12" x 12")
- Weight: 15kg (33lbs.)



VX-55

VOCAL AMPLIFIER

60W, 6-channel mixing amp with full reverb.

The Roland VX-55 gives you 6-channels and puts out a maximum of 60W (30W + 30W) rms.

- Speakers can be chosen from 2 models of different sizes and power outputs (PS-20 at 20W, PS-40 at 40W) to satisfy placement and performance requirements.

Respective power outputs will broaden the output range of this amplifier system.

- At each of the 6-channels, volume, base, treble and effect control is possible, and input selection is provided for microphones, instruments and tape recorders.

- The main control section provides for 2-channel balance control to suit any speaker layout arrangement.

- Input: 6-channel
- Channel Controls: Volume, Bass, Treble, Effect, Standby/Echo/Reverb Change Switch, 0dB/-20dB/-40dB Input selection available for each of 6-channels.
- Main Controls: Main Volume, Echo Volume, Reverb Volume, Balance Control each channel.
- Outputs: Speaker x 2, Line Out x 1
- Others: AC Outlet x 1, Echo Chamber Input x 2 (to Echo, from Echo)
- Power: 30W (8Ω) + 30W (8Ω) R.M.S.
- Semiconductors: Transistors x 3, ICs x 12, Diodes x 7, LED x 1
- Power Consumption: 200VA
- Dimensions: 400 (W) x 275 (D) x 250 (H) mm (15.7" x 10.8" x 9.8")
- Weight: 10kg (22lbs.)



VX-66

VOCAL AMPLIFIER

Mixing amplifier with echo to enhance any vocal arrangement.

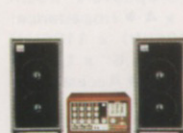
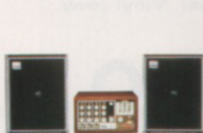
VX-66 is a 4-channel mixing amplifier with a 60-watt rms output (30W + 30W) which incorporates an electronic echo. Provided with Echo ON/OFF switches, echo can be effected or cancelled freely for each channel independently. Channels 1-3 are provided with 3-step input attenuators. Channel 4 is equipped with an input selector which selects one out of four of the program sources.

The completely electronic echo unit, not involving any mechanical or moving parts, guarantees high reliability without need of tape replacement and other complicated maintenance.

- Input jacks: Mic x 3 BGM, AUX-1, AUX-2, PHONO
- Controls: Treble, Bass, Channel volume
- Main control: Master volume, Echo volume, Echo intensity, Echo repeat
- Switches: Echo ON/OFF switch, Input attenuator (0dB/-20dB/-40dB), Stand by switch, Input selector (channel 4), Aux-2 input level switch (0dB/-20dB)
- Output jacks: Line output (0dB), Speaker (with one-touch terminal)
- Output: 60 watts rms (30 watts + 30 watts) 8Ω
- Others: Power switch, Pilot lamp
- Semiconductors: 19 IC's, 27 transistors, 12 diodes, 2 FET's, 1 LED
- Power consumption: 130 watts
- Dimensions: 350 (W) x 207 (H) x 260 (D) mm (13.8" x 8.1" x 10.2")
- Weight: 7.2kg (15.8lbs.)



VX-66 V



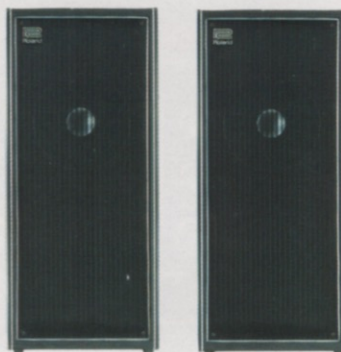
A full selection of speaker systems for stage and studio.

PS-80



• Input: 80W (rms) • Speakers: 20cm x 4, Horn Tweeter: x 4 • Impedance: 8Ω • Dimensions: 406(W) x 1185(H) x 310(D)mm (16.0" x 46.6" x 12.2") • Weight: 36kg (79.2lbs.) • Accessories: Speaker cord (10m), Vinyl cover

PS-30



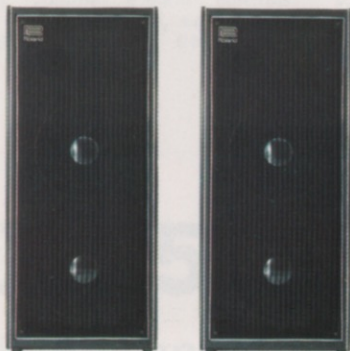
• Input: 30 W (R.M.S) • Speaker: 25 cm x 1 • Impedance: 8Ω • Dimensions: 390 (W) x 915 (H) x 258 (D) mm (15.4" x 36.0" x 10.2") • Weight: 13kg (28.6lbs.) • Accessories: Speaker cord (10 m), Vinyl cover

PS-20



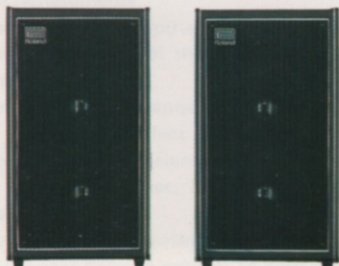
• Input: 20W (R.M.S) • Speaker: 25 cm x 1 • Impedance: 16Ω • Dimensions: 385 (W) x 490 (H) x 188 (D) mm (15.2" x 19.3" x 7.4") • Weight: 5.5kg (12.1lbs.) • Accessories: Speaker cord (5 m), Vinyl cover

PS-60



• Input: 60W (R.M.S) • Speakers: 25 cm x 2.10 cm x 1, • Impedance: 8Ω • Dimensions: 390 (W) x 915 (H) x 258 (D) mm (15.4" x 36.0" x 10.2") • Weight: 17kg (37.4lbs.) • Accessories: Speaker cord (10 m), Vinyl cover

PS-40



• Input: 30W (R.M.S) • Speakers: 20 cm x 1, Tweeter: 10 cm x 1 • Impedance: 8Ω • Dimensions: 360 (W) x 635 (H) x 258 (D) mm (14.2" x 25.0" x 10.2") • Weight: 10kg (22lbs.) • Accessories: Speaker cord (10 m), Vinyl cover

KEYBOARD ACCESSORIES

Keyboard Stands

KS-1



For the SH-1 Synthesizer.

KS-10



Adjustable width allows adaption to most of Roland's combo keyboards or the GR-500.

KS-20



For the MP-600 Combo piano and RS-505 Paraphonic.

KS-40



Holds three keyboards or the GR-500 Guitar Synthesizer. Height and tilt of each keyboard are freely adjustable.

Carrying Cases

CB-1



For the EP-10 Electronic piano.
• Weight: 5kg (11lbs.)

CB-2

For the SH-1000 and SH-2000 Synthesizers.

• Weight: 5kg (11lbs.)

CB-3

For the Model-101 Synthesizer, Model 102 Expander Unit.

• Weight: 4.5kg (9.9lbs.)

CB-4

For the SH-1 Synthesizer.

TB-4



For the JP-4 Compuphonic Synthesizer.
• Weight: 10kg (22lbs.)

TB-5

For the RS-505 Paraphonic.
• Weight: 10kg (22lbs.)

TB-6

For the VK-6 Combo organ.
• Weight:

TB-7

For the SH-7 Synthesizer.

• Weight:

TB-9

For the VK-9 Organ.
• Weight: 31.5kg (69.3lbs.)

Foot Volume

FV-2



Includes a control knob for adjustment of dynamic range.

• Dimensions: 130(W) x 70(H) x 305(D)mm (5.1" x 2.8" x 12.0")

• Weight: 1520g (3.3lbs.)

FV-1

Rugged cast metal construction.

Foot Switch

FS-1



ON/OFF Foot Switch

FS-2

ON/OFF control of two functions.

FS-3

ON/OFF control of three functions.

DP-1 Pedal Switch



Damper pedal for combo pianos.

Stereo Headphone

RH-2



Connection Cord Set



Phone Plug
↕
Phone Plug



Mini Plug
↕
Mini Plug

PJ-1

Phone Plug
↕
Pinplug Adaptor
Phone Plug



PCS-4 30cm x 2 (Black)
PCS-5 40cm x 2 (Grey/Green)
PCS-6 75cm x 2 (Grey/Green)
PCS-7 1.5m x 2 (Brown/Green)

PCS-11 20cm x 5 (Black)
PCS-12 20cm x 5 (Red)
PCS-13 60cm x 5 (Grey)
PCS-14 1m x 3 (Red)

Reverb Unit

(3-spring type)



• Input: Impedance (8Ω) • Output: Impedance (2250Ω) • Dimensions: 250(W) x 31(H) x 75(D)mm (9.8" x 1.2" x 3.0")
• Weight: 314g (0.7lbs.)

RHYTHM MACHINE TR SERIES

Roland Rhythms. A model for every need.

CR-78

Deluxe rhythm with 64 presets and a programmable microcomputer to create your own beats.

With the exciting new CR-78, you're only limited by your own imagination. This dramatically different rhythm machine has its own programmable microcomputer which lets you memorize any rhythm you arrange for recall at the touch of a button. In addition, you have 34 different preset rhythms, including 16 for rock and disco. And if this wasn't enough, it has a system of fast operating controls providing 11 different variations, fade-in, fade-out, tempo, accent, and 14 different instrument voices. Other features include trigger out for synchronizing synthesizers or sequencers, remote control, and a handsome wood cabinet.



- Rhythms: Rock 1 A/B, Rock 2 A/B, Rock 3 A/B, Rock 4 A/B, Rock 5 A/B, Rock 6 A/B, Disco 1 A/B, Disco 2 A/B, Bossanova A/B, Samba A/B, Mambo, Chacha, Beguine, Rhumba, Waltz A/B, Shuffle A/B, Slow Rock A/B, Swing A/B, Fox Trot, Tango Control Rhythm; A/B
- Voices: Bass Drum, Snare Drum, Rim Shot, Hi-hat, Cymbal, Maracas, Claves, Cow Bell, High Bongo, Low Bongo, Low Conga, Metal Beat, Tambourin, Guiro
- Programmer: Track LED 4, Program Rhythm Switch 4, Instrument Selector BD, SD, RS, HH, CY, M, C, CB, HB, LB, LC, Mode Switch Memory W/D, Play All Clear
- Variation: Mode Selector Switch; Fill IN 1-6, Break, Rolling (HB, SD), Rhythm (A, B), Measure Selector Switch 2, 4, 8, 12, 16, AUTO/MANUAL Switch, Manual Switch
- Add Voice: Metal Beat, Tambourin, Guiro
- Cancel Voice: Cymbal, Bass Drum, Snare Drum, Cow Bell
- Others: START/STOP Switch, TEMPO Control, ACCENT VOLUME, VOLUME Control, BALANCE Control, POWER Switch, FADE IN Mode Switch (Long Short, OFF), FADE OUT Mode Switch (Long Short, OFF)
- Remote Control Jack: START/STOP, VARIATION, MEMORY WRITE
- Output: High, Low, Clock; 8, 4, combination
- AC Voltage: 100V, 117V, 220V, 230V, 240V, 50/60Hz
- Power Consumption: 10W
- Dimensions 300(W) x 265(D) x 205(H)mm (11.8" x 10.4" x 8.1")
- Weight: 4.8kg (10.6 lbs.)
- Cabinet Finish: Printed flywood finish
- Accessory: Connection cord (2.5m with pin-plug adaptor), Memory write switch

CR-68

Good enough to polish the edge of any performance.

This advanced rhythm shares all of the CR-78's sophisticated electronics, only the programmable microcomputer and fade-in/fade-out features are lacking. Still, with its complete selection of patterns, modes and controls, it offers more than almost any other comparable unit.



- Rhythms: Rock 1-4, Disco 1, 2, Waltz, Shuffle, Slow Rock, Swing, Fox Trot, Tango, Boogie, Enka (a general in Japanese music), Bossanova, Samba, Mambo, Chacha, Beguine, Rhumba
- Voices: Bass Drum, Snare Drum, Rim Shot, Hi-hat, Cymbal, Maracas, Claves, Cow Bell, High Bongo, Low Bongo, Low Conga
- Variation: Fill IN 1-7, Break, Rhythm (A/B), Rolling-HB, SD
- MEASURE SELECTOR (2, 4, 8, 12, 16)
- Control Knob: 4 (LEVEL, BALANCE, ACCENT, TEMPO)
- Switch (Button): 5 (START/STOP, RHYTHM PATTERN Selector, AUTO/MANUAL Selector, MANUAL, POWER)
- Jack: Output 2, HI; 220kΩ LOW; 10kΩ, max. 0dBm (Vol.; max., Acc Vol.; min.), Foot Switch; 2, START/STOP, VARIATION (DP-1), Trigger Pulse OUT, OFF; 0V ON; +15V pulse
- Trigger Pulse Select in Switch (8 beat, 16 beat, combination)
- Indicator: TEMPO (also used as power switch pilot lamp)
- AC Voltage: 100V, 50/60Hz
- Power Consumption: 8W
- Dimensions: 260(W) x 275(D) x 180(H)mm (10.2" x 10.8" x 7.1")
- Weight: 4.5kg (9.9lbs.)
- Accessory: 2.5m hookup cord

TR-66 RHYTHM ARRANGER

- The "Arranger", an automatic rhythm unit providing a wide variation of rhythm patterns.
- Twenty-seven rhythms are available in all: eighteen rhythms, including six rock rhythms with the Variation Selector Controls and nine rhythms with the Rhythm Selector Push-buttons.
- The wide range Tempo and Balance controls produce subtle variations of rhythms.



- Construction is surprisingly compact. Ideal for enhancing performances of combos, solo guitar, for mixing and recording, as well as for solo electronic organ performances.
- Dimensions: 162(H) x 230(W) x 267(D)mm (6.4" x 9.1" x 10.5") • Weight: 4kg (8.8lbs.)
- Accessory: 2.5m cord.

TR-700

- Stage-type Roland Rhythm with built-in amplifier and speaker.
- Electrostatic touch start-stop switch.
- Electronic metronome built in.
- Up-tempo double-time switch.
- Fade out switch (with variable fade out) allows sound to fade gradually at end of the music.
- Add-voice volume adds or cancels voices in each rhythms.
- Pilot lamps indicate when "Tempo-speed", "Fade-out Time" and "Up-tempo" are activated.



- Dimensions: 680(H) x 386(W) x 240(D)mm (27.8" x 15.2" x 9.5") • Weight: 16kg (35.2 lbs.) • Accessory: Pedal Switch (DP-1)



TR-77

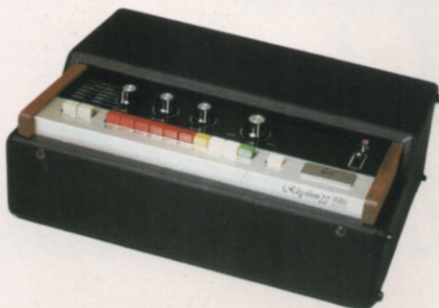
- New touch start for instant Start or Stop without mechanical noise.
- Up Tempo, for instant double time-adds variety to rhythm sounds.
- New fade out feature variable allows sound to fade gradually at end of the music.
- Diode indicator light-flashes instantly in time with Rhythm (no warm up time as with regular lamps)
- Electronic metronome built in.



- Thousands of Rhythm patterns and variations.
- Individual volume controls for the separate instrument sounds so you can tailor the Rhythm sounds to your own preference.
- Latin Rhythm section is separated for quick visual selection.
- Dimension: 95(H) x 640(W) x 310(D)mm (3.7" x 25.2" x 12.2") • Weight: 7.5kg (16.5 lbs.) • Finish: walnut finish, with hard resin
- Accessory: connection cord, foot control switch, plug adapter

TR-55

- Portable rhythm unit for the travelling musician.
- Electrostatic touch start-stop switch.
- Up-tempo double-time switch.
- Diode flashes in time with the beat.
- You can mix your own sounds.



- Dimension: 130(H) x 380(W) x 235(D)mm (5.1" x 15.0" x 9.3") • Weight: 4kg (8.8lbs.)
- Accessory: foot control switch, connection cord

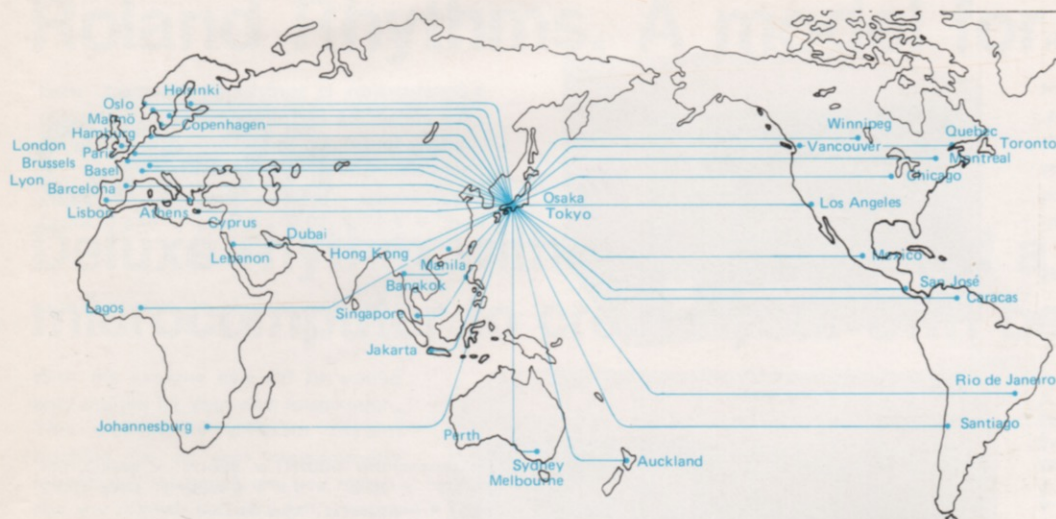
TR-33

- Compact deluxe rhythm to attach at keyboard level of organ.
- Electrostatic touch start-stop switch without mechanical noise.
- Up-tempo double-time switch for added interest to rhythm patterns.
- You can tailor the patterns to suit yourself.
- Diode flashes in time with the rhythm.
- Attaches easily to any organ or piano.



- Dimension: 120(H) x 220(W) x 260(D)mm (4.7" x 8.7" x 10.2") • Weight: 3kg (6.6lbs.)

ROLAND'S INTERNATIONAL NETWORK



WE HEARTILY ENDORSE "ROLAND"



Mike Rutherford



Stylus



Joachim Kühn Band



Don Lewis



Go Die Go



Pepe Leinhard Band

ARTISTS USING "ROLAND"

Isao Tomita
 Jeff Beck
 Greg Lake (E.L.P.)
 Herbie Hancock
 Straps
 Van Halen
 Dave Mason
 Kiss
 U.K.
 Roger Powell
 Genesis
 Tangelin Dream
 Kansas
 ELO (Electric Light Orch.)
 Stevie Wonder
 Steve Miller
 Grateful Dead
 Jimmy Page (Led Zeppelin)
 Jeff Baxter (Doobie Bros.)
 Carole King
 Bee Gees
 Gladys Knight & The Pips
 Alice Cooper
 Earth, Wind & Fire
 Wings
 Elvin Bishop
 Steeley Dan
 Chicago
 B.B. King
 Cat Stevens
 Beach Boys
 Linda Ronstadt
 Jackson Browne
 Frank Zappa
 Elton John
 Leo Sayer
 J.J. Johnson
 Leon Russell
 Graham Central
 Al Kooper
 K.C. & The Sunshine Boys
 Joni Mitchell
 Pink Floyd
 War
 Three Dog Night
 Sly
 Seals & Croft
 America
 The Band
 Santana
 Donna Sommers
 Crosby, Stills & Nash
 Eagles
 Lee Ritenhour

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- Specifications and appearance subject to change without notice.
- Because of limitations in the printing process, colors shown may differ from the actual colors of the products.

